

# Healthy Family

Connecting business success with social progress: 10 years on the ground



# Healthy Family at a glance

Through its Healthy Family programs, Novartis is expanding access to community education, improved infrastructure and affordable healthcare products for people living at the base of the pyramid in India, Vietnam and Kenya – in a way that is sustainable for its business.

Each program is unique and adapted to each country's healthcare priorities and local customs. To be included in the respective portfolios, products need to be simple to use and tailored to meet the needs of underserved populations with a low disposable income, usually earned on a daily basis.

## Highlights

### 40 m

People have attended health education sessions since 2010

### 3 m

Patients have received diagnoses and treatments at health camps since 2010

### 51

Products in Healthy Family portfolios in India, Vietnam and Kenya

### 6

Key therapeutic areas addressed by Healthy Family portfolios in India, Vietnam and Kenya\*

### 30

Revenues grew 30 times since the launch of the Healthy Family programs in India, Vietnam and Kenya\*\*

### 522

Full-time equivalent positions and contractors working for Healthy Family programs in India, Vietnam and Kenya

\* Therapeutic areas cover infectious diseases, cardio-metabolism, epilepsy, gastro-intestinal, pain and allergy, and women's health.

\*\* First-year revenues of each program were added up and compared to 2017 total revenues.

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## Foreword

Ten years ago, C. K. Prahalad, a management thinker, challenged our Executive Committee to do more to reach large numbers of people living at the base of the pyramid in developing countries – those earning less than USD 2 per day. It struck a chord with our management team in Basel and India.

Already back then, soft drinks were available in most villages in India, but global pharmaceutical companies were hardly present in rural communities, operating mainly in urban areas. While fast-moving goods companies had developed a business model through which daily wage earners could afford their products, our products were only accessible to those who could pay for a whole pack of medicines. Sadly too, medicines were often only available to those who could afford a doctor's appointment.

Despite the differences between our industry and the consumer goods sector, we felt we could learn from their business model of hiring and training local people to work in their own communities.

At the heart of the Healthy Family approach is a symbiotic relationship with communities. In India, Kenya and Vietnam, health educators often work in or near the community where they grew up. Being an integral part of these communities gives them legitimacy with villagers, builds trust through word-of-mouth, and generates insights from the ground.

Another key characteristic of the program is the co-existence of two separate yet mutually reinforcing arms. Social activities, both healthcare education and health camps, are independent from commercial operations yet financed through product sales.

When we launched our Healthy Family program in India in 2007, we aimed to work at a scale sufficient to improve healthcare for people in rural areas earning between USD 2 and 5 per day. The program reached breakeven just 30 months after launch.

After India, we looked at where to replicate a similar program. We made our selection based on criteria including economic and population growth, scale of the base-of-the-pyramid segment, healthcare needs, relevance of our product portfolio to local needs, and market attractiveness. Applying these criteria yielded three countries: Kenya, Vietnam and Indonesia.

We adapted the program to Vietnam and Indonesia in 2012 and to Kenya in 2013. Vietnam became self-sustaining in 2015, and Kenya broke even at the end of 2017. Yet we soon realized we couldn't simply replicate a model given the differences in healthcare infrastructures and systems, stakeholders, regulatory environments and local competition. Unfortunately, the program we launched in Indonesia never took off – partly because we only had one product to offer, and also because our operations on the ground were lacking.

We have big plans for the future and are exploring expansion into new countries and therapy areas. We are also looking at partnerships with other companies and organizations that have complementary expertise and products. Further, to monitor and evaluate the program's impact on health, we aim to apply a framework we developed with Boston University in the US for Novartis Access.

Our overall ambition is to continue empowering rural communities to take control of their health through access to health education and affordable products. We believe this is the only way to break the vicious cycle of poor health and poverty.

**Harald Nusser**  
Head of Novartis Social Business

# Interview with Marc Pfitzer, managing director, FSG

Marc Pfitzer has extensively written on shared value, which argues that a company's success and social progress are interdependent. He has also closely followed the journey of Arogya Parivar and more broadly of social business activities at Novartis over the years.



## **What makes the Novartis Healthy Family programs different from existing shared value initiatives from other pharma companies?**

There are four elements that make the Novartis social business unique in my perspective: The programs cut across disease areas with medicines available for a range of indications, they are profitable (in fact, India became profitable very quickly), they have scale, and they employ local people as implementation partners rather than global nongovernmental organizations (NGOs).

Further, they have the various elements that make markets more inclusive of low-income populations built into their core: an innovative business model that combines supply chain management at the village level with health education; collaboration with public authorities; village-based health camps that influence health-seeking behavior.

## **Do you think Novartis has an advantage in driving these kinds of social business models vs. the competition? Why?**

Novartis combines assets that enhance its ability to scale a profitable social business. These include a strong corporate mission focused on improving and extending lives, a legacy of going after hard-to-reach populations with its malaria and leprosy programs, a high-quality generics business that means greater comfort working with high-volume/low-priced business models, and a broad range of medicines across multiple disease areas.

## **From your perspective, what would you say are the key learnings and challenges from 10 years of Healthy Family programs on the ground?**

Novartis recognized early on the importance of the Indian market, which has a high level of unmet needs in rural areas, a growing population and potential large patient base, and importantly, a high percentage of out-of-pocket health expenditures. For sure, starting in a market with less favorable conditions would have fueled criticism from skeptics who doubted that low-income populations could be served profitably!

A key source of insight was the company's early push to track the linkages between investment in health education camps and health-seeking behavior (i.e., going to a healthcare practitioner) as well as access to medicines. Further, ensuring local stocks of essential medicines were available meant the full loop could be measured and optimized.

Of course, the next challenge – coming especially from the health community – is to prove that medicines spend is truly affordable (with respect to family income) and is improving access to healthcare. This requires evaluation and measurement that are difficult to bear for a low-margin social business. In my opinion, the way forward will be to encourage public and philanthropic partners to support such measurement and insights generation, and to invest in other systems that can enable a social business to scale.

### **Do you see any risks associated with Healthy Family?**

Asking a social business to bear all the costs associated with health impact measurement, or health education and health worker capacity building, can undermine the profitability and therefore scalability of inclusive business models. It is essential for partners to recognize their role in creating and investing in the enabling context for such business models to function. This cannot be left alone to one company.

### **What would be the most meaningful criteria for determining if Healthy Family is successful or not?**

There are several: the medicine offering against local unmet needs (so how well the offering matches the local disease burden); the reach into low-income populations; the attendance at health camps and linkages to health-seeking behavior; and the growth and profitability of the social business.

### **In your view, what should be the next step for Healthy Family? How could the program have broader impact?**

Healthy Family should broaden its reach in existing countries and also expand to new countries. It should further improve the breadth and local “suitability” of its product offering. Finally, it should encourage local partners to invest in the enabling conditions that support a social business and its potential to further impact access to care.

### **Do you think Novartis has succeeded in “walking the talk” of its ambition with Healthy Family?**

Yes, and this has been demonstrated by the constantly evolving business model (based on continuous learnings and adjustments), including overcoming internal barriers to best position this business within Novartis. This is also exemplified by the willingness of the company to tackle impact measurement challenges without necessarily the due support from public health partners.

## **A model based on six “A’s”**

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### **Awareness**

Health education meetings on hygiene, nutrition and common prevalent conditions increase disease awareness and inform communities about prevention and the importance of good health.

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### **Adaptability**

Products are tailored to the local disease burden, and health educators adapt the program to local needs, including dialect and culture. Training of health educators and supervisors – as well as communication – are also suited to local conditions.

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### **Affordability**

Medicines in the Healthy Family portfolios meet affordability criteria in rural settings. Further, providing health services and medicines close to home minimizes travel costs, which can be more expensive than treatment.

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### **Availability**

Healthy Family programs ensure availability of medicines and healthcare in rural settings. Strong links with healthcare practitioners, pharmacists and distributors help make medicines available in the most remote areas. Through health camps, doctors travel to rural areas to provide screening, diagnosis, treatment and preventive care.

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### **Adherence**

Several factors account for low adherence rates to treatment in developing countries, including the out-of-pocket cost of drugs or low levels of health literacy. Health education meetings and health camps help by providing information about the importance of following treatment through.

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### **Alliances**

Implementing large-scale health solutions requires alliances with multiple partners, including governments, NGOs, distributors, companies, academic institutions, etc. Healthy Family programs work with several groups to deliver integrated healthcare solutions, from health awareness through to treatment affordability.

# Arogya Parivar in India

Thanks to strong economic growth and rising incomes, India's base-of-the-pyramid population living on a few dollars a day is set to shrink significantly, from 379 million adults in 2015 to 145 million adults in 2030. Yet for some 850 million men, women and children in more than 650 000 villages across India, the idea of accessible, affordable and high-quality medicines remains as remote as their homes.

Given the limited purchasing power of these populations, combined with the necessity to adapt the product offering, efforts by companies to offer healthcare products and services have been limited. Most pharmaceutical companies have focused on areas where healthcare infrastructure is more developed (i.e., the urban market).

Novartis launched Arogya Parivar, its first social business model, in 2007. The program is organized into cells that currently total 239. Each cell – covering 35-40 km – includes 60 to 75 villages and small towns with around 200 000 inhabitants. Today, the program operates across 11 Indian states, covering some 14 000 villages and small towns that are home to more than 32 million people.



## Two separate yet mutually reinforcing arms

A team of health educators and sales supervisors is deployed in each cell. The health educators work closely with village leaders and local Asha (accredited social health activists) as well as Anganwadi workers appointed by the government to conduct community health education. Local health educators teach their communities about health-related issues, host health education meetings, and explain the importance of seeking out diagnosis and treatment from a qualified doctor before a condition worsens. This creates positive health-seeking behavior in the community by integrating prevention efforts into daily life and generating awareness “ripples” about disease recognition and treatment. In addition, local doctors donate their time at health camps to provide screening, diagnosis and therapies.

Referral cards were introduced at the inception of the program to track how many health camp participants go on to actually seek diagnosis and care. However, many villagers forget to use these cards, making it nearly impossible to track this number.

Sales supervisors serve as the initiative's local sales force, interacting with distributors, pharmacists and local doctors to ensure medicines are available in rural communities. They play an essential role in establishing a solid distribution network for a sustainable medicines supply and in building future business for Novartis. On average, a sales supervisor travels 45 to 60 km per day to meet 11 doctors and seven pharmacists.

The revenues generated through the sale of Arogya Parivar products fund the program's social arm (i.e., the health education activities). Beyond our company, we believe that in the long term, this will also help create a level playing field with regards to quality medicines and marketing practices.

Health educators are true “agents of change,” playing an essential role in raising awareness among local communities about health conditions and in promoting positive health-seeking behaviors. They receive regular training and use storytelling to get key health messages across, with the aim of changing people’s behavior.

Arogya Parivar offers affordable medications from Novartis against diseases that are prevalent in rural India. The portfolio addresses pain and inflammation, infectious diseases (respiratory and skin/urogenital infections), malnutrition (iron, calcium and folic acid deficiencies), pregnancy needs (prenatal supplements), and pediatric needs (anti-infectives, deworming, calcium supplements). Given the rising incidence of chronic conditions such as hypertension and diabetes in rural India, plans are underway to include Novartis Access products against noncommunicable diseases (NCDs) in the offering.

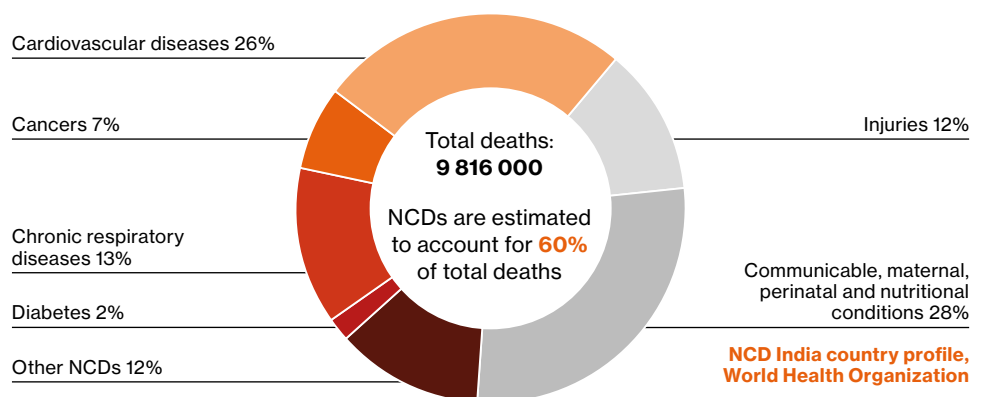
## Creating value for business and society

Arogya Parivar broke even in less than three years and has been sustainable ever since, meeting both its commercial and social targets. It is expected to reach 44 million people through health education meetings and health camps by 2022.

In 2017, 7.3 million villagers attended more than 149 000 health education meetings. In addition, more than 398 000 people participated in nearly 9 200 health camps, of whom 102 000 went to a physician afterwards.

The program is consistently recognized through awards and global rankings. It has received the Award for Social Marketing from the CMO Asia Awards, and the GBCHealth Business Action on Health Award. It was also named “best long-term rural marketing initiative” by the Rural Marketing Association of India, the country’s largest industry association. In 2015, Fortune magazine included Arogya Parivar in its top 10 Change the World list, which shines a spotlight on companies that have made significant progress in addressing major social problems as part of their core business strategy.

### Proportional mortality (% of total deaths, all ages, both sexes)\*



\* The mortality estimates for this country have a high degree of uncertainty because they are not based on any national NCD mortality data.

## Moving forward

To support the ongoing development of rural physicians who volunteer for the program, Arogya Parivar is partnering with the Family Planning Association of India to train 200 physicians in the state of Maharashtra. The collaboration is expected to expand to other states in 2018. Trainings are primarily on women's health, including overall health and hygiene issues, nutrition, and sexual and reproductive health. These rural doctors will be linked to specialized physicians who will provide mentorship when counsel is needed during patient management and care, ensuring adherence to standardized protocols and national guidelines.

In a partnership with apparel company Levi's and its supplier Aquarelle, Arogya Parivar health workers will train 50 Aquarelle factory workers and supervisors to serve as peer health educators on health topics such as women's health. These trained workers will then be able to deliver basic health education to their 1 000 co-workers in biweekly sessions, supporting the nurse and physician who provide healthcare services on the factory's premises.

To bring healthcare services to remote communities, we worked with Tech Mahindra, an information technology provider, to develop an online platform linking villagers to physicians in primary healthcare facilities. We will pilot the tool in the Aquarelle factory, training the onsite nurse to enter a worker's basic health parameters on the platform, which a doctor can then access to make a diagnosis and send an electronic prescription if necessary. We will also pilot the tool in the state of Uttar Pradesh.

We are exploring ways to work with a local NGO to train health educators on communication, self-administration and leadership skills so they can continue providing health education to communities independently from the program. We will pilot this approach in 11 cells in Andhra Pradesh, a state in India. Ultimately, the aim is to ensure we have a social legacy transfer strategy, while introducing Arogya Parivar to new areas with high unmet needs.

The number of cells has grown exponentially in the past decade from roughly 10 to 239 today. We aim to expand to 350 cells with more than 500 distributors covering approximately 47 000 doctors and 36 000 pharmacies in the coming years. There are also plans to bring diagnostics closer to communities by facilitating partnerships between rural physicians and diagnostic companies.





## Kamlesh

Kamlesh is one of Arogya Parivar's most successful and motivated health educators.

He has become a familiar and welcome sight to the impoverished villagers who live near Bhadkad in the state of Gujarat, spreading the message of good health and recruiting men and women to do the same in neighboring villages.

Kamlesh follows a religious philosophy that praises non-violence, good hygiene, temperance and the upliftment of the masses. It also encourages youth to participate at the grassroots level to ensure productivity and motivation. Kamlesh used to be a tobacco farmer but his religious convictions led him to do something to help the community rather than something that was potentially damaging to the health of his fellow humans. Arogya Parivar gave him the opportunity to get more involved in his community and also gave him the confidence to speak in public.



## Kanchanben

Kanchanben lives in Kheda, a village near Ahmedabad in Gujarat.

A few years ago, she started experiencing dizziness and a general weakness of the body. She did not understand what was happening but knew she had to do something.

She knew Kamlesh and the work he was involved in with Arogya Parivar, so she told him about her situation. He asked her to attend the next health camp, where the onsite doctor recognized her symptoms as those related to low blood cell count and referred her to the local clinic for tests. She averted a dangerous situation by being proactive and seeking out help. With her health improving and her body getting stronger, Kanchanben decided to contribute and so joined up as an Asha worker. Now she divides her time between caring for her home and spreading the message of good health in communities. She has become a regular at the health camps and also does house calls to encourage attendance at camps.

# Cùng Sống Khỏe in Vietnam

Vietnam is one of the fastest growing economies in Asia and has a burgeoning population. The country has experienced exceptionally rapid economic growth in the past two decades, contributing to poverty reduction. Vietnam has also made impressive progress toward improving the health of its population – mainly in the areas of life expectancy, under-five mortality and malnutrition, and maternal mortality.

Despite these achievements, poverty and inequality remain high, especially in rural areas. Nearly 70% of the country's more than 90 million people live in rural areas and struggle with healthcare access, affordability and quality.

Economic growth and demographic changes are driving demand for healthcare services throughout Vietnam, primarily in the two economic centers of Hanoi and Ho Chi Minh City. Fueled by increased mobility, more and more people are traveling to urban hospitals to seek care, exceeding their capacity.

Unlike India and Kenya, Vietnam's healthcare system is largely state-run. To alleviate pressure, the government has initiated measures to boost healthcare services in second-tier cities and provinces, making steady investments in healthcare infrastructure. These efforts have led to major improvements, yet there are opportunities to further strengthen healthcare services for patients living at the base of the pyramid in rural communities.

## Strengthening Vietnam's health system

It is against this background that Cùng Sống Khỏe (CSK) was launched in 2012. Replicating the Arogya Parivar model, this public-private partnership between Novartis and Vietnam's Services of Health aims to increase utilization of the country's rural commune and sub-district healthcare infrastructure. CSK is focused on health education in rural communities and the provision of services such as screening and diagnosis.

As in India, rural pilots were launched to test CSK's design and healthcare messaging in four provinces before CSK expanded into 16 of Vietnam's 57 provinces in 2014. Rather than work through a contract service organization, CSK first partnered with commune doctors and medical college students who performed health educator roles.

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“As the healthcare system in Vietnam is developing, community programs such as Cùng Sống Khỏe are playing an important role in helping improve people's health. Cùng Sống Khỏe also demonstrates that benefits to both the business and the people can be mutually reinforcing.”

Nguyen Huu Tu, permanent vice president and general secretary of the Vietnam Young Physicians' Association

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Today, health education activities are contracted to NGOs that work with local healthcare institutes and provincial health services to implement health camps and physician trainings. A separate commercial team is responsible for product sales.

The obstacles CSK faced soon after launch were in creating a portfolio of affordable products for rural patients. The local market requirements meant that

Novartis-patented products could only be imported at a relatively high cost. This made it more challenging to offer products at the prices needed to generate sufficient revenues to sustain the program long term. As a result, the portfolio was expanded to include more Sandoz generic medicines, which enabled CSK to cover more of Vietnam's disease burden and increase revenues. CSK broke even in 2015 and has been profitable ever since.



## Cùng Sống Khỏe has three objectives:

### 1. Health camps for local populations

Together with doctors in community health centers, the program provides basic health education to rural communities on preventing diseases and conditions such as diabetes; hypertension; respiratory conditions; malaria; diarrhea; hand, foot and mouth disease; and other prevalent conditions. CSK also promotes better hygiene and nutrition, and expands access to health services such as screening and diagnosis. Since 2012, more than 1 million people have either received health education or health screening.

### 2. Training for rural doctors

Training sessions are organized for rural physicians to improve their medical knowledge and understanding of certain therapeutic areas. In 2017, 772 physicians from district and community health centers were trained on the diagnosis and treatment of hypertension and diabetes.

### 3. Commercial operations

In total, 17 healthcare products in four therapeutic areas are part of the CSK offering. A dedicated sales force provides product information to doctors, and our products are made available to patients living in rural communities through district hospital pharmacies.



## Addressing the rising incidence of chronic conditions

In Vietnam, mortality due to NCDs is four times higher than that due to infectious diseases, and cardiovascular disease is the leading cause of death in the country (33%). NCDs now account for more than 70% of the total incidence of diseases and health-related deaths. If NCDs are diagnosed early and are effectively managed, people with chronic conditions can live a healthy and productive life. However, many remain undiagnosed.

In 2016, work started with the Vietnam Cardiology Foundation to address chronic diseases, with health camps and training for local doctors held in

NCDs account for more than 70% of the total incidence of diseases and health-related deaths in Vietnam.

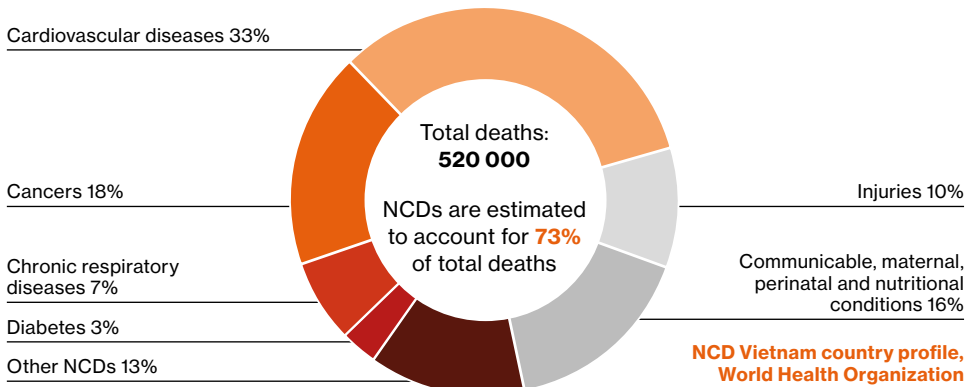
15 provinces. The program is building alliances with key healthcare organizations and is empowering local practitioners to provide high-quality healthcare services to remote rural communities.

## Moving forward

To further address the rising incidence of chronic diseases, which are particularly prevalent among rural populations and are one of the main causes of high health expenditures, we will start including medicines from the Novartis Access portfolio in the CSK offering. Two products will be added in select provinces with the objective of covering the entire basket over time.

The government of Vietnam has made great strides in moving the country toward universal health coverage. The poorest now receive free health insurance while the “near poor” (i.e., people living slightly above the poverty threshold) have to pay an enrollment premium to join a copay system. CSK is in discussions with the government to see how these patients can receive high-quality affordable medicines in the interim (before they are formally insured) through district hospital pharmacies.

Proportional mortality (% of total deaths, all ages, both sexes)\*



\* The mortality estimates for this country have a high degree of uncertainty because they are not based on any national NCD mortality data.

# Familia Nawiri in Kenya

Launched in 2013 in Kenya, Familia Nawiri was set up to address the health needs of the base-of-the-pyramid population living in rural areas. The program works with the national Ministry of Health, county governments, NGOs and private companies to bring healthcare education, services and products to underserved populations in Kenya.

Familia Nawiri was first piloted in three counties with easy access from the capital of Nairobi. It has since been expanded to nine counties, covering a population of approximately 1 million people.

Kenya's population is largely rural; approximately 70% of people reside away from urban areas. Distribution of medicines is centralized, with multiple layers along the way, leading to high markups on drug prices for patients. Moreover, access to big hospitals is a logistical challenge given the distance to these facilities.

## Bringing healthcare closer to rural communities

Familia Nawiri is community-driven. A team of 10 community health facilitators with basic education serve as health educators. Through a contracted local healthcare company, they are trained on key topics including hygiene, disease symptoms and treatment, and rational use of medicines. Community health facilitators are responsible for organizing interactions

with women's groups, church organizations, village leadership teams and others. At these meetings – usually held weekly – they discuss health topics based on the community's immediate concerns, such as asthma and other respiratory illnesses, diarrhea, cholera, basic hygiene and nutrition. In total, a community health facilitator holds three meetings with various groups every day.

Health education plays a major role in improving health outcomes in Kenya, even more so because the majority of deaths in the country are still caused by infectious diseases that can be prevented. This is why prevention is also a key topic at these sessions.

Community health facilitators are instrumental in mobilizing attendance at health camps and in sourcing healthcare practitioners and equipment for camps from nearby health facilities. Familia Nawiri holds health camps to bring healthcare services closer to poor populations at a price of KES 200 (USD 2) per person. This registration fee entitles villagers to receive data on their vital statistics, as well as diagnostics, a doctor consult and treatment if needed.



“A healthy family is the foundation of a thriving society and a prosperous nation. Patients at the base of the pyramid earn very little, and expenditure on health puts tremendous strains on families. In the five years we have worked with Familia Nawiri, besides improving health education and services for poor communities, the program has helped educate people on health-seeking behaviors, the importance of disease prevention, early diagnosis and health prevention – all very crucial to improve health.”

Dr. Salim Ali Hussein,  
Community Health and Development,  
Ministry of Health, Kenya

Patients diagnosed with chronic conditions receive initial treatment and are referred to the nearest qualified provider for follow-up care.

Health camps are not new in Kenya; government officials and medical schools offer health camps periodically. What differentiates Familia Nawiri from other initiatives is that camps are held regularly – usually once a month – and aim for manageable staff-to-client ratios, availability of laboratory testing, and selection of medicines from the Kenya Essential Medicines List. Further, if necessary, patients can seek regular follow-up care in subsequent health camps and from public and private sector providers. This ongoing attention reinforces healthcare quality.

Health camps are usually held in schools or dispensaries on weekends and are attended by 150 to 300 people. Accredited healthcare practitioners such as nurses, doctors, laboratory technicians and pharmacy assistants join from the nearest hospital or health facility. They provide services including breast, cervical and prostate cancer screening; HIV counseling and testing; diagnosis; minor



laboratory tests; and therapies. Treatments at health camps are selected by the county health director and are procured locally from mission hospitals, the Mission for Essential Drugs and Supplies (MEDS), and other private sector distributors around facilities.

Medicines used are from different manufacturers and meet the quality criteria of MEDS. They address conditions and diseases related to dermatology; cardiovascular and gastrointestinal conditions; maternal health; and central nervous system, fungal and infectious diseases.

Health Masters Ltd., based in Kenya, and the NGO World Friends manage the health camps. Bringing health camps closer to communities reduces the need to travel far distances to seek care, as this is often burdensome and costly in rural Kenya.

As part of its collaboration with the Ministry of Health, Familia Nawiri also invites local and regional government field workers at health camps to conduct their own outreach efforts (on immunization and prenatal care, for instance). Further, the program teams up with Novartis Access (against major chronic diseases) on capacity-building activities to improve awareness and diagnosis of NCDs.

Since the start of the program, 736 185 people in Kenya have attended 23 387 health education meetings, and 43 705 patients have been diagnosed and treated at 287 health camps.

## Expanding to the urban poor

Given the pace of urbanization, urban poverty is projected to represent almost half of the total poverty in Kenya by 2020. In Nairobi, 60% of the population lives in slums with no or limited access to the most basic healthcare services. Poor infrastructure and illegal pharmacies and clinics cause more harm than good.

Outbreaks of diseases such as cholera and dysentery can easily overrun a health facility. The urban poor are even more vulnerable than the rural poor as they have to pay rent, buy food (people living in rural areas usually have family farms or gardens), and pay higher school fees.

In an effort to cater to the needs of this population, Familia Nawiri is conducting pilots with World Friends in four urban slum areas around Nairobi, representing a population of approximately 65 000. In one year, 12 health camps have been held in the four areas, with 2 259 participants and 210 lab tests carried out.

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## Keeping community health volunteers motivated

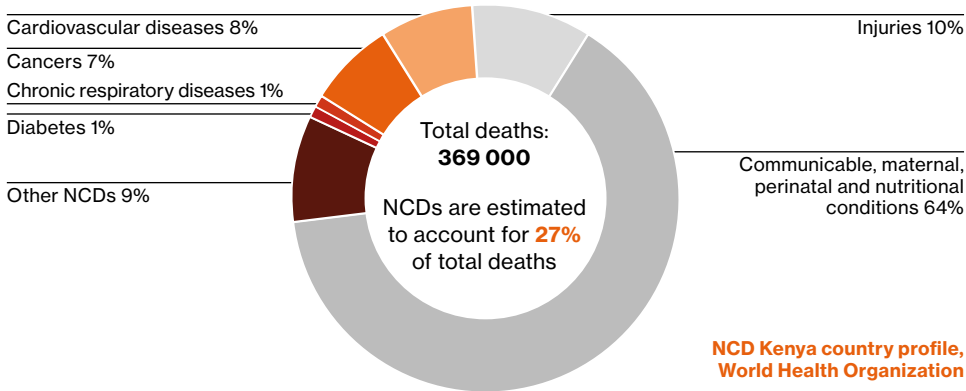
As part of the collaboration with World Friends, an assessment was conducted in four communities to evaluate how to strengthen the skills of community health volunteers and keep them motivated in their jobs.

The assessment revealed that it was necessary to retrain community health volunteers, leading to the training of nearly 200 of them in 2017. Topics included social mobilization, health promotion and disease prevention, management and use of community health information, and community disease surveillance.

Further, as community health volunteers often drop out due to a lack of motivation, another objective was to identify what would motivate them to stay and to pilot income-generating activities. This process began during the trainings where participants were asked to share their ideas. The idea of a child kit (called a Toto Care Box) for new mothers received the greatest support. The kit, which includes items such as a baby bed and mattress, a mosquito net and a delivery kit, is made available to new mothers during health camps. These kits supplement existing health promotion kits that include items ranging from medicines against common ailments (such as paracetamol and tetracycline) to a thermometer and a weighing scale.

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Proportional mortality (% of total deaths, all ages, both sexes)\*



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**Portfolio meets evolving needs**

A separate commercial arm looks after product sales. Key account managers and a team of 10 territory supervisors are responsible for detailing and promoting Familia Nawiri products to healthcare practitioners and for ensuring they are available at affordable prices in local facilities and retail pharmacies. Products, selected from the Kenya Essential Medicines List, treat the same conditions as in the health camps. Territory supervisors also facilitate continuing medical education programs

for local doctors. Given that territory supervisors are usually fresh out of school, they are trained to enhance their scientific knowledge and commercial skills, and to develop their ability to interact with healthcare practitioners.

Over time, the disease focus of Familia Nawiri has evolved. Today, maternal health is a key component, and the program partners with the Ministry of Health on its Safe Motherhood Program – especially targeting the reduction of postpartum hemorrhage, a major killer after childbirth.





In the first three years, the Sandoz and Novartis products included in the Familia Nawiri portfolio were sold at the same price as in the rest of the country, which turned out to be unaffordable for people living at the base of the pyramid. The introduction of the Novartis Access portfolio in 2015 in Kenya, with 15 products against chronic diseases such as hypertension and diabetes, made it possible for patients to purchase products at approximately USD 1.5 per treatment per month. Because Novartis Access products are distributed through faith-based

organizations, territory supervisors are working to create awareness for the portfolio in these channels as well as rural and peri-urban health facilities.

The addition of antimalarials to the portfolio in January 2017 – in collaboration with the Affordable Medicines Facility-malaria (AMFm) – also contributes strongly to sales performance, as this meets a pressing need for high-quality antimalarials. Familia Nawiri returned to growth in 2016 and broke even at the end of 2017.

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## Collaboration with Nestlé to bring health education to coffee farmers

Nestlé has been sourcing Arabica coffee from Kenya for more than 30 years, produced from approximately 42 000 farmers in 12 cooperatives in the central part of the country.

In an effort to further strengthen its coffee supply chain in Kenya, Nestlé is partnering with Familia Nawiri to bring health information and care to coffee farmers. The partnership is still in its infancy, but there is a sense that greater collaboration could create greater value. A pilot is underway whereby the cooperatives pay in advance the regular USD 2 fee for coffee farmers to attend Familia Nawiri health camps when they are unable to pay out of pocket. This system allows farmers to access healthcare services when they need them, even if they have no cash at hand. Cooperatives usually pay farmers twice a year and deduct this amount when they pay the farmers for their coffee beans. Nestlé and Novartis are also discussing the opportunity to provide nutrition information to people attending Familia Nawiri health camps.

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## Moving forward

Novartis plans to expand Familia Nawiri to three new counties in Kenya and to other countries in East Africa in the coming years. In parallel to this geographic expansion, there are plans to expand the Familia Nawiri product offering, adding treatments against asthma, epilepsy, cardiovascular diseases and intestinal worms.

Plans are underway to develop tailored health education programs for young children in primary school (6-13 years) on general health promotion, the role of physical exercise in preventing chronic conditions, and how to avoid addiction. These programs will also include career mentorship.

Similar to our partnership with Nestlé, we are exploring a collaboration with agribusiness Syngenta; the Kenya Tea Development Agency, one of the largest tea

management companies in the country; and Living Goods, an NGO that supports health entrepreneurs who teach families how to improve their health and wealth. In particular, we are planning on running health camps in tea-growing areas and other agricultural estates to offer screening, diagnosis and treatments to farmers. We would like to leverage Living Goods' large network of "Avon-like" health entrepreneurs who go door-to-door to incorporate Familia Nawiri activities in two specific counties.

In partnership with the Ministry of Health, Familia Nawiri is offering training to community health workers. In addition, we are considering introducing a social entrepreneurship program for community health volunteers to reduce attrition rates. They would be trained in basic skills such as taking blood pressure and weighing people, which would enable them to earn a small income while keeping their focus on health promotion and education.

# 10 years of learnings

Arogya Parivar quickly demonstrated the feasibility of the Novartis social business approach by breaking even 30 months after launch, and increasing sales by nearly 300 times in 10 years. Building on this success, Novartis launched Healthy Family programs in Kenya and Vietnam. However, our 10-year journey did not go without challenges, partly because the cross-divisional nature of the programs conflicted with the company's divisional setup.

## Adaptation to local realities is key

When it was decided to pilot Healthy Family in Kenya and Vietnam, despite common challenges, only some of what had been learned in India was applicable – meaning solutions had to be tailored to local culture, healthcare infrastructure (state-run or decentralized) and laws. Similarly, the product portfolio had to be aligned with local disease burdens, market structures and regulatory environments.

Common challenges included low levels of health-seeking behavior, widespread faith healing practices, weak healthcare and market infrastructure, and potential conflicts of interest between health education and sales activities. Mitigation measures were put in place to address these issues, and included a strong focus on improving community health education, bringing healthcare closer to villagers through health camps, setting up a reliable distribution system, and clearly separating social and commercial activities by having each area report to different individuals in the organization.

## Success requires breaking divisional silos

At the start, Healthy Family operated with a cross-divisional product portfolio from Sandoz, Over-the-Counter and Vaccines – with Pharma products added later. When products were available in a country, there were internal discussions about whether they could also be sold under the Healthy Family banner or if this would represent a commercial risk in the existing market. As the portfolio was limited in Kenya and Vietnam, products had to be registered, but registrations were slow and required alignment with divisions because there was no central function within Healthy Family to manage them.

There was a perception that Healthy Family programs would slow down the business and threaten the P&L, conflicting with the expectations from mainstream commercial operations to deliver higher results for the same portfolio.

The situation was compounded by the fact that Healthy Family programs needed to first test the market before scaling up. As a result, only small quantities of products could be ordered that were not financially material to the company and that generated higher administrative costs. There were also tensions and disagreements about where to book the sales





and carry the losses. Should it be local Healthy Family operations or the divisions?

Because the program shared the sales force and distribution network of the divisions on the ground, this made it particularly challenging in the early days of Arogya Parivar to separate out sales in adjacent urban and rural areas (divisional activities focused on urban areas, and Arogya Parivar focused on rural areas). Additionally, the portfolio that was relevant to urban populations may not have been tailored to rural needs as well. These tensions led to a discussion about whether Healthy Family should develop its own brand and packaging to sell medicines in smaller package sizes or even by the unit to make them affordable for daily wage earners. Some products, such as calcium tablets for women, were already sold in smaller doses.

Beyond the substantial costs associated with changes in product packaging, this did not necessarily make sense for all products such as antibiotics, which often

have treatment cycles that last several days. In the end, the decision was made to keep packages as they were and not develop an umbrella brand. This decision was recently revised, and the Novartis Social Business team is now working on a separate packaging line for its portfolio.

Regarding funding, each Healthy Family program had to seek budget from divisions, and this was challenging given they did not have the same level of priority as the mainstream business. This also sometimes delayed final budget approval until the middle of the actual budget year, making it difficult to run operations on the ground. Support from the corporate center for funding and long-term investment in a central Healthy Family unit was also lacking, which made it difficult to set up local operations and hire resources needed in regulatory affairs and supply chain management, for instance.

In 2012, a Healthy Family program was started in Indonesia with a focus on child and maternal health education, but the product offering was limited to oxytocin. This was not enough to sustain operations in the long term, and there was also no proper local organization to manage and scale up the activities. Indonesia already has a large and low-priced generics market that is dominated by national companies, and it imposes high import taxes, making it challenging for multinational healthcare companies to compete. The decision was therefore made to close the program in 2016. The key learning here was that we should only implement programs in countries where we already have sizable local operations.

## **Program must be anchored in the business to drive growth**

When Healthy Family started to scale up, its cross-divisional nature conflicted even more with the budgeting, financial and commercial processes of divisions that were not set up to leverage a cross-divisional business model. This led to the decision in 2009 to integrate Healthy Family into a new cross-divisional unit, eliminating the need to deal with multiple divisional bureaucracies. In 2012, Healthy Family was then moved to Sandoz, which made sense from a portfolio perspective. However, a generics business operates with lower margins, making it more difficult to absorb financial losses during investment and scale-up phases. Further, the generics market is very dynamic and has a shorter-term view on investment decisions compared to what is required

to build market share and long-term social impact activities in future growth markets. Every additional cost – combined with lower returns on sales and smaller margins – made it challenging to raise investments for future growth.

Because Healthy Family was often moved across the Novartis organization, it was difficult to integrate the unit into the strategy and growth plans of any division; secure investments; and build institutional knowledge about the programs, which led to considerable onboarding costs. Attracting senior talent was also a hurdle because there was no strategic integration or fully supported growth plans, and small budgets could not provide competitive compensation.

In 2016, Healthy Family was integrated into a new unit, Novartis Social Business, which combines the company's flagship access programs (e.g., Novartis Access, the Novartis Malaria Initiative, SMS for Life, and NGO supply). The inclusion has facilitated cross-divisional engagement, resulting in better realignment. The various programs, especially Healthy Family and Novartis Access, can now build on synergies in terms of product portfolio and registration, country expansion, and Novartis presence on the ground.

## Determining social impact requires putting measurement and evaluation at the core

Beyond measuring input and output indicators (such as number of employees, number of health camps and people attending camps, product sales, etc.), measurement and evaluation were not originally built into Healthy Family programs. There were attempts early on in India to track whether health education sessions increased visits to doctors by distributing referral cards to attendees. However, very few villagers used these cards, which made the reporting unreliable. The group later discussed adding a measurement and evaluation component, but this was not implemented as other topics were given higher priority. As a result, while we have extensive data on input and output indicators, we can't measure outcomes and impacts on rural villagers and patients that are attributable to the programs. Are Healthy Family programs improving the knowledge of people attending health education sessions, and is this improved knowledge changing health-seeking behaviors and ultimately resulting in better health in communities? The data we are monitoring



“The purpose of the corporation must be redefined as creating shared value, not just profit per se. This will drive the next wave of innovation and productivity growth in the global economy.”

Michael Porter, Harvard Business School

does not enable us to practically and scientifically prove the social impact of the programs. This is why when we launched Novartis Access, our portfolio of drugs against chronic diseases, measurement and evaluation were built as a core element of the program. We are currently exploring how to apply the monitoring and evaluation framework we developed with Boston University for Novartis Access to Healthy Family programs.

## Strategic review leads to a clear separation of responsibilities

In 2013, a review of the Arogya Parivar business model was conducted to determine what worked and what could be improved. The focus was on India, but it was assumed that learnings would also inform the programs in Vietnam and Kenya even though each was different.

One issue was related to reporting lines, as health educators were reporting to managers who were responsible for both social and commercial activities. This potential collision of interests led to the decision to separate reporting lines and to establish a social arm that would operate independently from the commercial one. Another issue was the need to distinguish product sales and distribution in urban areas from that in rural areas, prompting the establishment of a network of distributors for Arogya Parivar only.

The products in the portfolio were also reviewed to ensure they were aligned with World Health Organization and national essential medicines lists. Therapeutic areas were addressed, and given the rise of NCDs in India and lower-income countries in general, it was agreed to include treatments against these conditions. Plans are currently underway to add selected products from the Novartis Access portfolio to Healthy Family programs.



# Key performance indicators (KPIs)

		2017	2016	2015
<b>Amount invested in Healthy Family (multiples of year 1 investment)</b>	India (since 2007)	11.04	11.33	12.00
	Vietnam (since 2012)	1.54	1.28	1.55
	Kenya (since 2013)	4.48	5.11	4.87
<b>Revenues generated by Healthy Family (multiples of year 1 revenues)</b>	India (since 2007)	322.17	284.97	259.73
	Vietnam (since 2013)	8.74	7.71	7.09
	Kenya (since 2013)	23.72	29.41	6.37
<b>Health educators receiving training</b>	India	255	226	240
	Vietnam	772	885	3
	Kenya	10	10	10
<b>Amount spent on training for health educators and sales representatives (in USD thousands)</b>	India	53.19	113.82	89.46
	Vietnam	14.66	7.91	16.44
	Kenya	30.00	40.34	10.66
<b>Country presence</b>	India (states)	11	11	11
	Vietnam (provinces)	16	15	11
	Kenya (counties)	9	9	9
<b>Number of health education meetings</b>	India	149 006	137 454	127 183
	Vietnam	3 336	10 030	34 635
	Kenya	5 504	5 422	5 091
<b>People attending health education meetings</b>	India	7 357 538	7 452 622	7 156 273
	Vietnam	164 167	109 644	296 849
	Kenya	168 216	155 583	149 296
<b>Number of health camps</b>	India	9 232	6 850	9 466
	Vietnam	3 336	827	5
	Kenya	112	78	53
<b>People attending health camps</b>	India	398 618	361 420	586 327
	Vietnam	164 167*	49 600	1 068
	Kenya	16 835	17 773	5 279
<b>Healthy Family FTEs** (office-based employees)</b>	India	18	14	17
	Vietnam	4	4	5
	Kenya	2	4	5
<b>Healthy Family FTEs** (field force, including health educators and sales representatives)</b>	India	466	456	454
	Vietnam	11	16	15
	Kenya	21	19	19

All KPIs have been externally assured.

\* As of 2017, health education meetings and health camps in Vietnam are held immediately one after the other. This is why the number of people attending both events is identical. Participation is not counted twice.

\*\* Full-time equivalent positions and contractors

# Independent Assurance Report on Novartis Healthy Family 10-year Report

## To the Board of Directors of Novartis AG, Basel

We have been engaged to perform assurance procedures to provide limited assurance on selected data of the Novartis Healthy Family 10-Year Report of the company and its consolidated subsidiaries (Novartis Group).

### Scope and subject matter

Our limited assurance engagement focused on selected Healthy Family indicators for the periods ending as of December 31, 2017, December 31, 2016 and December 31, 2015 as disclosed in the Novartis Healthy Family 10-year Report:

- a) The Healthy Family key performance indicators as disclosed on page 22; and
- b) The management and reporting processes to collect and aggregate the selected Healthy Family indicators as well as the control environment in relation to data aggregation.

### Criteria

The reporting criteria used are described in Novartis Group internal reporting guidelines and define those procedures by which the Healthy Family indicators are internally gathered, collected and aggregated.

### Inherent limitations

The accuracy and completeness of the Healthy Family indicators are subject to inherent limitations given their nature and the methods for determining, calculating and estimating such data. Our assurance report should therefore be read in connection with Novartis Group guidelines, definitions and procedures on the reporting of Healthy Family indicators.

### Novartis responsibilities

The Board of Directors of Novartis AG is responsible for both the subject matter and the criteria as well as for selection, preparation and presentation of the information in accordance with the criteria. This responsibility includes the design, implementation and maintenance of related internal controls relevant to this reporting process that is free from material misstatement, whether due to fraud or error.

### Our responsibilities

Our responsibility is to form an independent opinion, based on our limited assurance procedures, on whether anything has come to our attention to indicate that the Healthy Family indicators are not stated, in all material respects, in accordance with the reporting criteria.

We planned and performed our procedures in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (revised) 'Assurance engagements other than audits or reviews of historical financial information'. This standard requires that we plan and perform the assurance engagement to obtain limited assurance on the identified Healthy Family indicators.

A limited assurance engagement under ISAE 3000 (revised) is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment

procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks. Consequently, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement and therefore less assurance is obtained with a limited assurance engagement than for a reasonable assurance engagement.

### Our independence and quality control

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies the International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Summary of work performed

Our assurance procedures included the following:

- Reviewing the application of the Novartis Group internal reporting guidelines
- Interviewing associates responsible for internal reporting and data collection
- Performing tests on a sample basis of evidence supporting selected Healthy Family indicators concerning completeness, accuracy, adequacy and consistency
- Inspecting relevant documentation on a sample basis
- Reviewing and assessing the management reporting processes for Healthy Family reporting and consolidation and the related controls.

We have not carried out any work on data other than outlined in the scope and subject matter section as defined above. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusions.

### Limited assurance conclusion

Based on our work described in this report, nothing has come to our attention that causes us to believe that the data and information outlined in the scope and subject matter section (including the related controls) has not been prepared, in all material aspects, in accordance with Novartis Group internal policies and procedures.

PricewaterhouseCoopers AG



Martin Kennard Raphael Rutishauser

Basel, January 23, 2018

