Overview

According to the International Diabetes Federation, the number of people living with diabetes by 2045 is expected to rise to over 700 million\(^1\). For this reason, diabetes and cardiovascular disease are considered a public health concern and a burden for healthcare systems worldwide, with the increasing number of cases and associated healthcare costs.

People already diagnosed and living with diabetes and or cardiovascular disease have to face many challenges. They see their doctors only a few times per year, miss support in between, need to adapt their nutrition, exercise, medication, and also have to take adequate insulin dosages to prevent complications in the future.

Sanofi is a French multinational pharmaceutical company and a leader in providing diabetes treatment and related services. It has recognized the importance of the management of these diseases and the need to develop an integrated approach to improve quality of life and support patients and healthcare systems by offering more than medicine. By combining Sanofi’s quality drugs with services, devices and data management, it creates a new way to improve outcomes and patient experiences and act as a health journey partner.

In 2016, Sanofi established a Colombian-based inclusive business using a patient-centric model designed to address local barriers in diabetes care for underserved populations that have limited access to services and or products. Through the partnerships developed with tech companies to involve new technologies such as artificial intelligence, Sanofi helps Health Maintenance Organizations (HMOs)\(^2\) manage at risk-of-diabetes patients and improve evidence-based treatments for those already diagnosed.

---

2. In Colombia HMOs are the entities responsible for the affiliation and registration of members and the collection of their contributions, by delegation of the Solidarity and Guarantee Fund. Their basic function is to organize and guarantee, directly or indirectly, the provision of the Health Plan to various members.
Key Stakeholders

Colombian National Law 100 of 1993, established a healthcare system consisted of two parallel plans: a Contributory Health Plan for formal employees and citizens who can afford it and a subsidized health plan for those who cannot afford a contributory plan. These plans are determined by the socio-economic stratum of each person or family. Families whose score classifies them as vulnerable or living in poverty are connected to a subsidized plan administrator. According to the Ministry of Health and Social Protection, in 2019, around 48% of the Colombian population, approximately 22.8 million people, fell under the subsidized programme.³

Sanofi built an alliance with three HMOs who care for patients in the subsidized regimen. With the assistance of a technologic company, Sanofi was able identify and track patients by analyzing data collected by HMOs with new algorithmic models, help identify possible new patients.

1. Assessing Readiness and Capacity

Sanofi has strong experience in data analysis and management of performance indicators and commercial Key Performance Indicators (KPIs). Additionally, Sanofi has specialized in the effective assessment of costs and utility health initiatives.

The company has conducted several measurement studies over the years and recently designed a more structured impact management approach as part of Business Call to Action’s (BtCA) Impact Champions Programme. The company measured the effectiveness of their interventions such as workshops and educational campaigns on diabetes prevention in early childhood. The company joined the Impact Champions Programme to organize and assess data to support decision-making processes with concrete results that can assist previous empirical field observations, enabling the initiative to scale up.

At the start of the Impact Champions Programme, Sanofi was found to have an advanced capacity for undertaking impact measurement and management. This is because the company’s inclusive business initiative is grounded in data analysis of their customers’ and patients’ needs. It’s important to highlight Sanofi’s adoption of new information and communication technologies for collecting and using data in daily operations and product design processes.

Sanofi benefits from impact management as it allows them to:

- Build a social reputation by demonstrating social and environmental impact;
- Understand customers’ needs;
- Understand market opportunities and risks.

2. Planning For Impact

I. Impact Value Chain

The Impact Value Chain is a visual map of how an organization’s strategy and operations contribute to its business value and the Sustainable Development Goals (SDGs). The Impact Value Chain allows the organization to understand holistically the effects of its inclusive business activities on different groups of people and the planet. Sanofi tracks its performance on its business activities and results, short and long-term outcomes and goals using the following framework:

In Colombia, more than one million people have been diagnosed with diabetes. Diabetes ranks ninth among causes of deaths and sixth among the list of problems that cause the most disability. Yet, there is a very high proportion of undiagnosed diabetics within the subsidized national healthcare program. Many live at the base of the economic pyramid (BoP) and among those already diagnosed, including insulin-requiring diabetics, there is a high percentage of undertreated or inadequately treated patients due to lack of efficiency, tools and methodologies to find, track and treat patients, leading to elevated rates of avoidable complications. Moreover, there is a lack of structured data systems for better decision-making processes and limited resources to track patients diagnosed with diabetes.

To address these structural issues, Sanofi coordinates with HMOs of subsidized health programmes to promote efficiency in diabetes risk and care management. Sanofi provides the HMOs with breakthrough technology and a methodology that helps the monitoring of patients at a very large scale using artificial intelligence and big data analysis. The company also trains primary care physicians and health management staff that serve low-income communities in the prevention, diagnosis and treatment of diabetes. Moreover, Sanofi provides an enhanced patient support programme that efficiently helps HMOs track individual patients.

These activities help Sanofi keep diabetes treatment affordable, increase access to insulin for low-income patients, improve basic needs for the treatment of illness, and catalyse local alliances between Sanofi and insurers in the subsidized health programme.

As a result, Sanofi contributes to the HMOs digital transformation enabling better health risk management and treatment. This enables HMOs to increase efficiency and visualize more innovative solutions for the better understanding of patients’ needs. This also provides better quality health services with more data and evidence-based treatments.

In the long run, Sanofi’s contributions to diabetes management will lead to the sustainable consumption of products and services, allowing people to have a better quality of life. Sanofi aims to increase access to healthcare and reduce the burden of healthcare costs in low-income households and assist Colombia’s health system in the prevention of morbidity and mortality with the better health risk and care management of patients.

---

Sanofi tracks the performance of its inputs, outputs, outcomes and impact goals using the following framework:

**Sanofi’s Impact Value Chain**

**Lack of efficiency in the provision of diabetes risk and care management**
- Forge alliances with HMOs of subsidized health regime that promotes efficiency in diabetes risk and care management
- Provide HMOs with breakthrough technology and methodology that helps with the monitoring of patients at a large scale
- Provide an enhanced patient support programme that efficiently help HMOs track individual patients
- Support continuing medical education activities through traditional alternative channels

**HMOs using tools and methodologies based on technology to find and track diabetic patients**
- Consolidated partnerships with HMOs that generate synergies and efficiencies in diabetes risk and care management
- HMOs have consolidated and structured information with actionable data that allows tracking the diabetic population efficiently
- Patients enrolled in patient support programme
- Specialist HMO physicians and general practitioners trained

**Difficulty of HMOs in the individual tracking of patients diagnosed with diabetes**
- HMOs increase efficiency in characterization diagnosis and tracking of complications in diabetic patients
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**Shortage of HMO resources to offer continuing medical education**
- HMOs increase efficiency in characterization diagnosis and tracking of complications in diabetic patients
- Reduced morbidity and mortality from target disease and ailments

**Forge alliances with HMOs of subsidized health regime that promotes efficiency in diabetes risk and care management**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes
- Reduced burden of healthcare costs on low-income communities

**Provide HMOs with breakthrough technology and methodology that helps with the monitoring of patients at a large scale**
- Extended partnership with HMOs that generate synergies and efficiencies in diabetes risk and care management
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes
- Increased primary healthcare in low-income communities

**Provide an enhanced patient support programme that efficiently help HMOs track individual patients**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**Support continuing medical education activities through traditional alternative channels**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**Consolidated partnerships with HMOs that generate synergies and efficiencies in diabetes risk and care management**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**HMOs have consolidated and structured information with actionable data that allows tracking the diabetic population efficiently**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**Patients enrolled in patient support programme**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**Specialist HMO physicians and general practitioners trained**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**Efficiency in overall diabetes management will lead to sustainable consumption of products and services associated with diabetes care**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**Reduced morbidity and mortality from target disease and ailments**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**Reduced burden of healthcare costs on low-income communities**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**Increased primary healthcare in low-income communities**
- HMOs have deep individual and collective understanding of patients regarding the stage of diabetes

**Decision-Making Questions**

- Which are the factors that determine the lack of efficiency?
- How many HMOs belonging to the subsidies regimen have partnered with Sanofi to enhance efficiency in the diabetes risk and care management?
- How many HMOs have partnerships consolidated in diabetes risk and care management?
- To which extent have HMO’s increased their skills in the use of methodologies and technologies to increase the efficiency in diabetes risk and care management?
- What is the percentage of diagnosed patients with diabetes over the HMO’s population prevalence?
- What is the increase of the diabetes diagnosed rate in the last period per HMO?
- What is the percentage of controlled patients with diabetes over the total HMOs diagnose patients?
- Does the medium insulin dosage comply with the clinical standard (30-40 UI/Kg/Day/patient)?
- What is the percentage of patient treated with insulins over total diabetes treated population?

**Indicators**

- Number of HMOs that implement a traceability system for monitoring medication, health services consumption and health outcomes
- Number of HMOs enhancing efficiency in diabetes risk and care management
- Number of HMOs adopting a traceability system to monitor health outcomes in diabetes patients
- Reported Prevalence and Expected Prevalence of Diabetes
- Diagnostic gap over prevalence
- Percentage of total diabetes patients that have controlled diabetes
- Medium insulin dosage of insulin treated patients
II. Understanding and Describing Impact

Business Call to Action integrates IMP’s shared logic in the Impact Lab to help companies plan for impact measurement and management starting with assessing their outcomes considering the five dimensions described above.

Sanofi is contributing to four distinct goals:

1. **Efficiency in overall diabetes management** will lead to sustainable consumption of products and services associated with diabetes care,

2. **Reduced morbidity and mortality** from target disease and ailments,

3. **Reduced burden of healthcare costs** on low-income communities, and

4. **Increased primary healthcare** in low-income communities.

Sanofi mapped each goal against the five dimensions of impact to better understand its significance and to better manage and communicate its impact.

**Goal 1: Reducing the cost of living of low-income communities**

<table>
<thead>
<tr>
<th>What</th>
<th>Suppliers and Producers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppliers and Producers</td>
<td></td>
</tr>
<tr>
<td>Not Important</td>
<td>Important</td>
</tr>
</tbody>
</table>

**Who**

<table>
<thead>
<tr>
<th>Who</th>
<th>Suppliers and Producers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppliers and Producers</td>
<td></td>
</tr>
<tr>
<td>Underserved</td>
<td>Well-served</td>
</tr>
</tbody>
</table>

**Contribution**

<table>
<thead>
<tr>
<th>Contribution</th>
<th>How does the impact compare to what is likely to occur anyway?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suppliers and Producers</td>
<td></td>
</tr>
<tr>
<td>Likely Worse</td>
<td>Same</td>
</tr>
</tbody>
</table>

**Risk**

<table>
<thead>
<tr>
<th>Risk</th>
<th>What is the risk that the impact is not achieved due to external or internal factors?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk</td>
<td>Low Risk</td>
</tr>
</tbody>
</table>
3. Monitoring Performance

Altogether, three HMOs collected data of 4.5 million affiliates covering 20% of the subsidized national healthcare programme. Sanofi engaged a third-party organization to consolidate, structure and analyse this data to help the company assess performance against its Impact Value Chain described above. Unstructured data from three HMOs, who have affiliates in the states of Nariño, Valle, and Bolívar, was gathered in 2016 to form a baseline against which progress could be tracked annually. Key insights from the data gathered include:

**What**

Sanofi helps HMOs deploy new technologies such as artificial intelligence, making them more efficient in diabetes care management and helping them reduce morbidity and mortality.

- 312 primary care physicians and health management staff that serve low-income communities were trained in prevention, diagnosis and treatment of diabetes.
- All three HMOs stated that Sanofi’s technology solution added value to diabetes care management
- The HMOs agreed on the necessity and relevance of the technological resources in making their work more efficient

**Who**

- According to the Ministry of Health and Social Protection, around 48% of the Colombian population (approximately 22.8 million people) fell under the subsidized programme in 2019.
- More than one million people have been diagnosed with diabetes. Out of these, there is a high percentage of undertreated or inadequately treated patients, leading to elevated rates of avoidable complications.

**How Much**

- 51% increase from 56,350 to 85,224 in the number of newly diagnosed patients by 2 HMO’s since 2016 to 2018.
- 93% increase from 4,975 to 9,621 in the number of patients with controlled diabetes (Hb1c) by 2 HMO’s since 2016 to 2018.

**Contribution**

- Patients in low-income communities have access to specialized healthcare programme because of the subsidized programme
- Patients in low-income communities under the subsidized programme have access to better evidence-based diabetes treatment helping them to avoid future complications
- The control rate, obtained from the sum of affiliates divided by the sum of the number of patients controlled, increased by 2.5% from 8.8% to 11.3% from 2016 to 2018 for two HMOs.

**Risk**

- Sanofi’s impact is contingent on external factors that might influence the capabilities and response of the HMOs. The company faces a relatively high external risk since external variables such as pandemics can affect care provided to patients diagnosed with diabetes.
- There is some execution risk as the availability to monitor data analysis within the HMOs could be affected due to the need to attend to other priorities such as emergencies and other healthcare crises.
- A low risk of endurance is prevalent as HMOs face limitations on financial and technical resources which can reduce the desired outcomes.

Sanofi doubled the supply of insulin to the subsidized healthcare programme and enrolled 17 new distributors that supply drugs mainly to HMOs of that same programme where low-income patients get access to health products and services.
Lessons Learned

While HMOs have vast amounts of data available, for a project like this to be successful it is crucial to structure data in a manner that makes it useable and actionable. Sanofi also learned that engaging project leaders in day-to-day management is key to successful implementation of activities and close monitoring of patients.

Sanofi recognizes the importance of planning social impact using tools such as the Impact Lab to build Sanofi’s strategic framework and understand how the company contributes to the SDGs.

Way Forward / Next Steps

Sanofi’s journey from the structuring of an inclusive business model to measuring outputs and impact goals has created a pathway that connects business operations with its desired social outcomes. The Impact Champions Programme was pivotal for Sanofi to integrate impact management in its inclusive business initiative. Sanofi aims to continue with measuring impact to drive its commitment and contributions to the SDGs.

“`The mission of our Global General Medicines business unit is to reverse the course of chronic disease epidemics such as diabetes,” said Oliver Charmeli, VP Global of General Medicines. Adding to Charmeli’s sentiments, Camilo Gonzalez, Public Affairs Manager at Sanofi said, “The approach of involving new technologies and impact measurement and management tools such as ImpactLab help us understand how our daily activities conducted to achieve the aforementioned mission, are also contributing to achieving the SDGs.” Going forward, Sanofi wants to improve its approach by integrating technologies that make provision of products and services more efficient and enable scaling up of subsidized healthcare for low-income communities.