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Base of the Pyramid

Novo Nordisk

Submitted as part of Access Accelerated



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The information in this report has been submitted by the company concerned to the Access Observatory at Boston University. The information will be updated regularly. For more information about the Observatory go to www.accessobservatory.org

The information contained in this report is in the public domain and should be cited as: Novo Nordisk, Base of the Pyramid (2020), Access Observatory Boston, US 2020 (online) available from www.accessobservatory.org



Program Overview

Program Name

Base of the Pyramid

- Diseases program aims to address
- Diabetes: Type 1, Type 2
- Beneficiary population
- Age group: Adults (15-64), Elderly (65+)
- · Gender: All genders
- Special populations: People with low income
- 4 Countries
- Ghana
- Nigeria
- Kenya
- Morocco
- Senegal

Program start date

January 1, 2012

Anticipated program completion date
 Completion date not specified.

Contact person

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Program summary

The Base of the Pyramid (BoP) programme aims to identify and implement sustainable solutions that give low income people at the base of the economic pyramid access to affordable, integrated and quality diabetes care. BoP works through public–private partnerships, promoting shared responsibility between Novo Nordisk, governments and various local stakeholders, and is aligned with the United Nations Sustainable Development Goals (SDGs). The BoP programme aims to create shared value to all the partners as well as provide value to Novo Nordisk's business.

The BoP programme works across five pillars, while each country project prioritises action based on the local unmet need and opportunity for greatest impact:

- 1. Awareness and screening
- 2. Strengthened physical infrastructure
- 3. Training of health care professionals
- 4. Stable and affordable insulin supply
- 5. Patient education for self-management of diabetes

Program Overview



Program summary, cont.

BoP uses two different approaches addressing different local contexts:

- Faith-Based Organisations (FBO) (Kenya, Ghana and Nigeria)

Focus on ensuring insulin availability and affordability for patients through FBO networks.

- Centres of Excellence of diabetes (Senegal and Morocco)

Focus on capacity building for quality integrated care outside of the capital cities.

The main programme partners are:

- The Ministries of Health (MoH) both at the National (MoH Senegal, Ghana and Kenya) and state/regional/county level (Kenya, Senegal, Ghana, Nigeria)

The MoHs, in collaboration with the facility owners and Novo Nordisk, contribute to capacity building in the countries by conducting educational activities for patients and healthcare providers. Additionally, MoHs support screening and diagnosis activities on a continuous basis in the clinics and at community outreach events.

- Drug Supply organizations (SDOs)

They distribute insulin to healthcare facilities within the project areas. It must be noted that SDOs are not in any way obliged to procure insulin from Novo Nordisk or Novo Nordisk distributors. The SDOs are free to enter any tender agreement or other agreements with alternative suppliers of insulin, at their discretion.

- Diabetes patient associations

The diabetes patient associations contribute to capacity building by supporting patient education sessions.

- Royal Danish Embassy (RDE) (Kenya & Ghana)

The RDE assists Novo Nordisk in project management as per agreements between the two parties.

Additionally, the RDE supports the implementation of the program with regards to monitoring and evaluation, as well as education and capacity building from an advisory role.

https://www.novonordisk.com/sustainable-business/commitment-to-access-and-affordability/programmes-and- partnerships.html

Program Strategies & Activities



Strategies and activities

Strategy 1: Community Awareness and Linkage to Care

ACTIVITY	DESCRIPTION
Mobilization	Awareness-raising activities and campaigns, e.g. for World Diabetes Day through e.g. radio or TV;
	Diabetes patient support groups providing awareness, education and peer support to improve self-management.

Strategy 2: Health Service Strengthening

ACTIVITY	DESCRIPTION
Training	Healthcare professional training for diabetes management provided in the form of educational activities and support materials.
Infrastructure	Establishment of diabetes support centers and centers of excellence.
Technology	Supporting clinics with diabetes-specific data tools to register and hold patient data Donation of HbA1c machines, fridges for cool storage of insulin, TV screens for awareness and education.

Strategy 3: Health Service Delivery

ACTIVITY	DESCRIPTION
Screening	Free diabetes screening provided through awareness-raising and screening campaigns.
Diagnosis	Training of healthcare professionals in diagnosing diabetes.
Treatment	Training of healthcare professionals in treating diabetes.

Strategy 4: Supply Chain

ACTIVITY	DESCRIPTION
Planning	Novo Nordisk works together with programme partners and national distributors to regulate the cost structures and coordinate the supply of insulin.
Infrastructure	Establishment of one-stop-shops which free up time and resources for people with diabetes by reducing transportation time and costs, as well as time spent at the hospital.

Program Strategies & Activities



Strategies and activities cont.

Strategy 5: Regulation & Legislation

ACTIVITY	DESCRIPTION
Advocacy	The BoP programme brings together partners, national and local health authorities and key opinion leaders, to increase awareness of the importance of recognizing diabetes as major health concern, allocating more resources in the health budget to the management and control of diabetes, and scaling up solutions in order to reach more people in need; e.g. by including BoP in the national Diabetes/NCD plan.

Strategy 5: Price Scheme

ACTIVITY	DESCRIPTION
Pricing	The price of insulin to the patients accessing care through the BoP programme is reduced through either differential pricing agreements or supply chain agreements aimed at limiting mark-ups, e.g. in Kenya the partnership with Philips, MEDS and the faith-based networks resulted in a price reduction of 75% for the patient.



STRATEGY **COUNTRY**

Community Awareness and Linkage to Care	Kenya, Senegal, Morocco, Ghana, Nigeria
Health Service Strengthening	Kenya, Senegal, Morocco, Ghana, Nigeria
Health Service Delivery	Kenya, Senegal, Morocco, Ghana, Nigeria
Supply Chain	Kenya, Senegal, Morocco, Ghana, Nigeria
Price Scheme	Kenya, Senegal, Morocco, Ghana, Nigeria
Regulation & Legislation	Kenya, Senegal, Morocco, Ghana, Nigeria

Companies, Partners & Stakeholders

Company roles

Novo Nordisk Novo Nordisk: Project management, partners and stakeholder engagement, coordination of project activities; funding of all components of the project incl. local project management, production of training materials, advocacy and awareness raising events locally and globally.

Funding and implementing partners

PARTNER	ROLE/URL	SECTOR
Mission for Essential Drugs and Supplies	(In Kenya) Importing, stocking and distributing of insulin from Novo Nordisk https://www.meds.or.ke/	Private
Phyllyps Medical	(In Ghana) Provides HbA1c machines and technical support https://www.facebook.com/phyllypsmedicaldia	Private
Kenyan Ministry of Health	(In Kenya) Provide the staff and the training of HCPs http://www.health.go.ke/	Public
Ministry of Health Ghana	Provide the staff and the training of HCPs http://www.moh.gov.gh/	Public
Federal Ministry of Nigeria	Provide the staff and the training of HCPs https://www.health.gov.ng/	Public
Philips Pharmaceuticals	(In Kenya) Importing, stocking and distributing of insulin from Novo Nordisk <u>https://www.philips.com/global</u>	Private
Palb Pharmaceuticals	(In Ghana): Provides support for and awareness activities and screening https://www.palb-pharma.net/	Private
Ministère de la Santé et de l'Action Sociale Senegal	(In Senegal) Provide the staff and the training of HCPshttp://www.sante.gouv.sn/	Public
Royaume du Maroc Ministère de la Santé	(In Morocco) Provide the staff and the training of HCPs https://www.sante.gov.ma/Pages/Accueil.aspx	Public
Christian Health Association Kenya (CHAK)	It's a faith-based network in Kenya. It ensures the implementation of the programme through their health facilities and they are supply chain partners. It's a semi-public sector partner. https://www.chak.or.ke/	Private

Companies, Partners & Stakeholders

12 Funding and implementing partners cont.

PARTNER	ROLE/URL	SECTOR
Association Séngalaise de Soutien et d'Assistance Aux Diabétiques (ASSAD)	Patient organisation in Senegal. They support with patient support groups, education and awareness activities. http://mdiabete.gouv.sn/?page_id=77	Voluntary
Christian Health Association of Nigeria	Faith-based network in Nigeria. They ensure the implementation of the programme through their health facilities and they are supply chain partners. It's a semi-public sector partner. http://channigeria.org.ng/	Private
World Wide Commercial Ventures Limited	Commercial distributor that supplies the insulin to the BoP centres in Nigeria. http://www.wwcvl.com/contact.php	Private
Pharmacie Nationale d'Approvisionne- ment (PNA)	The organisation procuring the insulin supplied in the two BoP centres in Senegal. http://www.pna.sn/pna.php	Public
National Catholic Health Service (NCHS)	A faith-based network in Ghana. They ensure the implementation of the programme through their health facilities and they are supply chain partners. It's a semi-public sector partner. [No URL provided]	Private
Kenya Defeat Diabetes Association (KDDA)	It's a patient association in Kenya. This partner provides support with patient support groups, education and awareness activities. https://www.iapo.org.uk/kenya-defeat-diabete association-kdda	Voluntary
Royal Danish Embassy (RDE)	The RDE in Ghana assists Novo Nordisk in project management as per agreements between the two parties. Additionally, the RDE supports the implementation of the program with regards to monitoring and evaluation, as well as education and capacity building from an advisory role. https://ghana.um.dk/	Public
Royal Danish Embassy (RDE)	The RDE in Kenya assists Novo Nordisk in project management as per agreements between the two parties. Additionally, the RDE supports the implementation of the program with regards to monitoring and evaluation, as well as education and capacity building from an advisory role. https://kenya.um.dk/	Public
Ghana Health Service (GHS)	The Ghana Health Service is the implementation body of the public health sector, on behalf of MoH. GHS regulates the functions and manages all secondary level hospitals and polyclinics, health centres, primary health posts, etc. http://ghanahealthservice.org/	Public
Kenya Conference of Catholic Bishops (KCCB)	Kenya Conference of Catholic Bishops (KCCB) Faith-based network in Kenya. It ensures the implementation of the programme through their health facilities and they are supply chain partners. It's a semi-public sector partner. https://www.kccb.or.ke/	Private

Companies, Partners & Stakeholders

13 Funding and implementing partners by country

COUNTRY
Kenya
Ghana
Nigeria
Nigeria
Senegal
Senegal
Senegal
Morocco
Ghana

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Stakeholders

STAKEHOLDER	DESCRIPTION OF ENGAGEMENT	
MININELLIOEDELIN	DESCRIPTION OF ENGINEERS	

REQUESTED OR RECEIVED FROM STAKEHOLDER

Local hospitals/ Health facilities	Infrastructure: Allocated physical facilities to be dedicated to diabetes care as diabetes clinics	Infrastructure: Yes Human Resources: Yes
	Human resources: Health care professionals providing diabetes care to patients	Funding: [No response provided] Monitoring or Oversight: [No response provided] Other resource: [No response provided]

Local Context, Equity & Sustainability

Local health needs addressed by program

In every society around the world, there are people living with diabetes who are not receiving the treatment and care they need. This problem is acute in low- and middle-income countries where four in five people with diabetes live. In Africa, 38 million adults have diabetes. However, 3 out of 5 people with type 2 diabetes are undiagnosed.

This gap in care for diabetes and other non-communicable diseases hasn't received the attention it needs, and the consequences are profound: if not well controlled, diabetes can cause blindness, kidney failure, lower limb amputation and can increase the risk for end-stage renal disease, cardiovascular events and pregnancy complications, which can severely impact quality of life.² At the time of diagnosis, 50% of people already have at least one complication.³ Half of the 100 million people who need insulin globally do not have access to it.4 Furthermore, there are gaps in the availability for basic technologies and essential medicines for detecting, diagnosing, monitoring and treating diabetes in low-income countries.⁵ The major barriers to diabetes essential medicines and technologies are financing, health systems, and supply chains.⁶

For many years, development aid has focused on improving access to health care for people living in the least developed countries. However, over one billion people globally with low incomes, the working poor, also have difficulties accessing health services. These people earn between \$1,500 and \$3,000 per annum, have some disposable income, are accessible and can contribute to financing their own treatment. Novo Nordisk estimates that 46 million people in this segment have diabetes and that the number will grow to 73.5 million in 2030. The Base of the Pyramid programme aims to facilitate access to diabetes care for people in this segment in low- and middle-income countries. The programme works together with public and faith-based health institutions to strengthen the existing health care system, both with regard to physical facilities and health care workers capacity. Thereby, the programme does not create an unsustainable parallel infrastructure in the project countries.

Further, the Base of the Pyramid programme is using different business models in different countries. The models are adapted to address local barriers to care and to meet the context-specific needs of people with diabetes at the base of the economic pyramid. The partnership models are also adapted to the local stakeholder environment. The partners are primarily local health authorities and healthcare organisations. Further, BoP cooperates with the local diabetes patient associations and the countries' ministries of health to advocate for a higher prioritization of diabetes and general NCD care in the respective national health plans.

How needs were assessed

The needs were assessed through our knowledge of the local context via local affiliates, and dialogue with local diabetes stakeholders.

Formal needs assessment conducted

No

Social inequity addressed

The BoP programme aims to find solutions that ensure access to affordable and quality diabetes care for people who would otherwise either not have access, have only sporadic/unreliable access to medical services and treatment, or not receive proper care and thus potentially develop more complications and have a lower quality of life as a consequence.

hiring practices

Local Context, Equity & Sustainability

U Local policies, practices, and laws considered during program design

POLICY, PRACTICE, LAW	APPLICABLE TO PROGRAM	DESCRIPTION OF HOW IT WAS TAKEN INTO CONSIDERATION	
National Regulations	Yes	Collaboration with Ministry of Health within existing regulations, formalized in memorandum of understanding.	
Procurement Procedures	Yes	Within existing public procurement system.	
Standard Treatment Guidelines	Yes	The standard treatment guidelines which are mandated by the MoH are always used in the training of healthcare staff.	
Quality and Safety Requirements	Yes	In accordance with local and Novo Nordisk requirements.	
Remuneration scales and	No	No hiring or remuneration of health care professionals through Novo	

18 How diversion of resources from other public health priorities is avoided

Non-communicable diseases including diabetes are already under resourced and understaffed in low income countries, therefore the programme aims to create more awareness around the need for more resource allocation and the benefits hereof. This is in line with the Ministries of Health' own positions.

Nordisk.

Program provides health technologies (medical devices, medicines, and vaccines)

TYPE COMMERCIAL NAME		INTERNATIONAL NON-PROPRIETARY NAME AND/OR INN	
Medicine	Novo Nordisk Human Insulin (Actrapid, Insulatard, Mixtard)	[No response provided]	
Device	HbA1c machines	[No response provided]	

Local Context, Equity & Sustainability

Health technology(ies) are part of local standard treatment guidelines

Yes, Human insulin is.

Health technologies are covered by local health insurance schemes

Yes, Human insulin is.

Program provides medicines listed on the National Essential Medicines List

Yes, Human Insulin is.

Sustainability plan

The primary objective of the BoP initiative is to overcome current barriers to treatment in a scalable and sustainable manner. This means that value is created for all the partners and stakeholders involved, ensuring the sustainability of the programme. BoP aims at strengthening existing infrastructures to provide better access to diabetes care and treatment, creating awareness in the communities and building the capacity of patient associations, so that benefits for patients can be achieved irrespective of Novo Nordisk's future involvement.

Additional Program Information

24 Additional program information

[No response provided]

Potential conflict of interest discussed with government entity

Yes. The BoP programme's aim is to be sustainable for the partners involved, i.e. also from a business point of view, which has been made clear from the start. However, the internal Novo Nordisk functions in relation to the programme are separated, i.e. the programme managers in the different countries are not part of the commercial organization, and are not allowed to detail products or in any way act as sales reps.

25 Access Accelerated Initiative participant

No

International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) membership

Yes

Resources

- 1. International Diabetes Federation. IDF Diabetes Atlas, 9th edn. Brussels, Belgium: International Diabetes Federation, 2019.
- 2. Global Report on Diabetes. World health Organization 2016. Accessed at http://apps.who.int/iris/ bitstream/10665/204871/1/9789241565257_eng.pdf.
- 3. Davis TM, Stratton IM, Fox CJ, Holman RR, Turner RC. UK Prospective Diabetes Study 22: effect of age at diagnosis on diabetic tissue damage during the first 6 years of NIDDM. Diabetes Care. 1997;20(9):1435-1441
- 4. ACCISS. Fact Sheet on Inequities and Inefficiencies in the global insulin market. Amsterdam: Health Action International; 2015. Retrieved from: http://haiweb.org/wp-content/uploads/2015/11/ACCISS-Fact-Sheet-1-Inequalities- in-Insulin-Market.pdf. Accessed September 201.
- 5. Global Report on Diabetes. World health Organization 2016. Accessed at http://apps.who.int/iris/ bitstream/10665/204871/1/9789241565257_eng.pdf
- 6. PATH. Diabetes Supplies: Are they there when needed? Seattle: PATH; 2015.

Program Indicators

Not yet available for this program.

Appendix

This program report is based on the information gathered from the Access Observatory questionnaire below.

Program Description

PROGRAM OVERVIEW

- **Program Name**
- Diseases program aims to address:

Please identify the disease(s) that your program aims to address (select all that apply).

Beneficiary population

Please identify the beneficiary population of this program (select all that apply).

Countries

Please select all countries that this program is being implemented in (select all that apply).

- **Program Start Date**
- **Anticipated Program Completion Date**
- Contact person

On the public profile for this program, if you would like to display a contact person for this program, please list the name and email address here (i.e. someone from the public could email with questions about this program profile and data).

Program summary

Please provide a brief summary of your program including program objectives (e.g., the intended purposes and expected results of the program; if a pilot program, please note this). Please provide a URL, if available. Please limit replies to 750 words.

PROGRAM STRATEGIES & ACTIVITIES

Strategies and activities

Based on the BUSPH Taxonomy of Strategies, which strategy or strategies apply to your program (please select all that apply)?

Strategy by country

If you have registered one program for multiple countries, this question allows you to provide a bit more specificity about each country (e.g. some countries have different strategies, diseases, partners, etc.). Please complete these tables as applicable. For each portion you have you selected from above (program strategies), please identify which country/countries these apply.

COMPANIES, PARTNERS AND STAKEHOLDERS

Company roles

Please identify all pharmaceutical companies, including yours, who are collaborating on this program:

What role does each company play in the implementation of your program?

Funding and implementing partners

Please identify all funding and implementing partners who are supporting the implementation of this program (Implementing partners is defined as either an associate government or non-government entity or agency that supplements the works of a larger organization or agency by helping to carry out institutional arrangements in line with the larger organization's goals and objectives.)

a. What role does each partner play in the implementation of your program? Please give background on the organization and describe the nature of the relationship between the organization and your company. Describe the local team's responsibilities

for the program, with reference to the program strategies and activities. (response required for each partner selected).

b. For each partner, please categorize them as either a
 Public Sector, Private Sector, or Voluntary Sector partner.
 (Public Sector is defined as government; Private Sector is
 defined as A business unit established, owned, and operated
 by private individuals for profit, instead of by or for any
 government or

its agencies. Generation and return of profit to its owners or shareholders is emphasized; Voluntary Sector is defined as Organizations whose purpose is to benefit and enrich society, often without profit as a motive and with little or no government intervention. Unlike the private sector where the generation

and return of profit to its owners is emphasized, money raised

or earned by an organization in the voluntary sector is usually invested back into the community or the organization itself (ex. Charities, foundations, advocacy groups etc.))

c. Please provide the URL to the partner organizations' webpages

Funding and implementing partners by country

If you have registered one program for multiple countries, this question allows you to provide a bit more specificity about each country (e.g., some countries have different strategies, diseases, partners, etc.). Please complete these tables as applicable. For each portion you have you selected from above (funding and implementing partners), please identify which country/countries these apply.

Stakeholders

Please describe how you have engaged with any of these local stakeholders in the planning and/or implementation of this program. (Stakeholders defined as individuals or entities who are involved in or affected by the execution or outcome of a project and may have influence and authority to dictate whether a project is a success or not (ex. Ministry of Health, NGO, Faith-based organization, etc.). Select all that apply.

- · Government, please explain
- · Non-Government Organization (NGO), please explain
- Faith-based organization, please explain
- · Commercial sector, please explain
- · Local hospitals/health facilities, please explain
- · Local universities, please explain
- · Other, please explain

LOCAL CONTEXT, EQUITY & SUSTAINABILITY

15 Local health needs addressed by program

Please describe how your program is responsive to local health needs and challenges (e.g., how you decided and worked together with local partners to determine that this program was appropriate for this context)?

- How were needs assessed
- Was a formal need assessment conducted

(Yes/No) If yes, please upload file or provide URL.

16 Social inequity addressed

Does your program aim to address social inequity in any way (if yes, please explain). (Inequity is defined as lack of fairness or justice. Sometime 'social disparities,' 'structural barriers' and 'oppression and discrimination' are used to describe the same phenomenon. In social sciences and public health social inequities refer to the systematic lack of fairness or justice related to gender, ethnicity, geographical location and religion. These unequal social relations and structures of power operate to produce experiences of inequitable health outcomes, treatment and access to care. Health and social programs are often designed with the aim to address the lack of fairness and adjust for these systematic failures of systems or policies.*)

*Reference: The definition was adapted from Ingram R et al. Social Inequities and Mental Health: A Scoping Review. Vancouver: Study for Gender Inequities and Mental Health, 2013.

Local policies, practices, and laws considered during program design

How have local policies, practices, and laws (e.g., infrastructure development regulations, education requirements, etc.) been taken into consideration when designing the program?

18 How diversion of resources from other public health priorities are avoided

Please explain how the program avoids diverting resources away from other public health priorities? (e.g. local human resources involved in program implementation diverted from other programs or activities).

Program provides health technologies

Does your program include health technologies (health technologies include medical devices, medicines, and vaccines developed to solve a health problem and improve quality of lives)? (Yes/No)

Health technology(ies) are part of local standard treatment guidelines

Are the health technology(ies) which are part of your program part of local standard treatment guidelines? (Yes/No) If not, what was the local need for these technologies?

Health technologies are covered by local health insurance schemes

Does your program include health technologies that are covered by local health insurance schemes? (Yes/No) If not, what are the local needs for these technologies?

Program provides medicines listed on the National Essential Medicines List

Does your program include medicines that are listed on the National Essential Medicines List? (Yes/No) If not, what was the local need for these technologies?

Sustainability plan

If applicable, please describe how you have planned for sustainability of the implementation of your program (ex. Creating a transition plan from your company to the local government during the development of the program).

ADDITIONAL PROGRAM INFORMATION

Additional program information

Is there any additional information that you would like to add about your program that has not been collected in other sections of the form?

Potential conflict of interest discussed with government entity

Have you discussed with governmental entity potential conflicts of interest between the social aims of your program and your business activities? (Yes/No) If yes, please provide more details and the name of the government entity.

Access Accelerated Initiative participant

Is this program part of the Access Accelerated Initiative? (Yes/No)

International Federation of Pharmaceutical Manufacturers & Associations (IFPMA) membership

Is your company a member of the International Federation of Pharmaceutical Manufacturers & Associations (IFPMA)? (Yes/No)

Program Indicators

INDICATOR DESCRIPTION

List of indicator data to be reported into Access Observatory database

For this program, activities, please select all inputs and impacts for which you plan to collect and report data into this database.

Data source

For this indicator, please select the data source(s) you will rely on.

29 Frequency of reporting

Indicate the frequency with which data for this indicator can be submitted to the Observatory.

Data collection

- a. Responsible party: For this indicator, please indicate the party/parties responsible for data collection.
- b. Data collection Description: Please briefly describe the data source and collection procedure in detail.
- c. Data collection Frequency: For this indicator, please indicate the frequency of data collection.

Data processing

- a. Responsible party: Please indicate all parties that conduct any processing of this data.
- b. Data processing— Description: Please briefly describe all processing procedures the data go through. Be explicit in describing the procedures, who enacts them, and the frequency of processing.
- c. Data processing Frequency: What is the frequency with which this data is processed?

Data validation

Description: Describe the process (if any) your company uses to validate the quality of the data sent from the local team.

33 Challenges in data collection and steps to address challenges

Please indicate any challenges that you have in collecting data for this indicator and what you are doing to address those challenges.