Gestational Diabetes: A Window of Opportunity to Improve Maternal and Child Health

Lessons Learned from the *Vida Nueva* project in Colombia

Joyce Polo Gomez, Barranquilla. Joyce has GDM.

Publication Supported by:

[Logos of Alcaldía de Barranquilla, World Diabetes Foundation, Novo Nordisk, and Accenture]
Gestational Diabetes Mellitus (GDM) refers to diabetes during pregnancy, an undertreated condition impacting nearly 18 million women every year.\(^1\)

Untreated GDM has serious consequences for maternal and newborn health, and increases the risk of developing diabetes and other non-communicable diseases (NCDs) later in life.\(^2\) Timely diagnosis and treatment of diabetes in pregnancy offers an important window of opportunity—a chance to reduce short- and long-term health risks for women and children. Unfortunately, GDM has received relatively little attention as a public health priority.

Impact of GDM on Maternal and Child Health

**Short-Term Impact**

- Significantly increased risk of **maternal morbidity and mortality due to complications** such as excessive birth weight (macrosomia), hemorrhage, hypertensive disorders, obstructed labor and infection/sepsis\(^2\)

- **Higher likelihood of preterm birth,** a leading cause of death in children under 5\(^3\)

**Long-Term Impact**

- **Highly increased risk** of developing NCDs such as diabetes, obesity and hypertension\(^2\)

- **About 50% of mothers with GDM develop type 2 diabetes within 5 years**\(^4\)

- A child is **up to 8 times more likely to develop type 2 diabetes** if its mother had undertreated GDM\(^5\)

“The cost of inaction against NCDs outweighs the cost of action for any country in the world today.”

ADDRESSING GDM IN COLOMBIA

Lessons can be learned from a locally-managed GDM project in Barranquilla, Colombia called “Vida Nueva” or “New Life.”

The project’s holistic NCD-awareness and capacity-building approach has unlocked vast resources, demonstrating that relatively small investments to integrate GDM care into existing prenatal services can significantly improve standards of care. To access the full case study, visit: http://www.worlddiabetesfoundation.org/what-we-do/pregnancy-and-diabetes-resources

**Vida Nueva worked with the government to:**

1. mandate GDM treatment guidelines for all public providers (a first in Colombia)
2. raise awareness among pregnant women
3. build the capacity of health workers and increase quality of care
4. improve patient support for Barranquilla’s most vulnerable population

The rate of GDM screening for pregnant women went from **5% to 97%** in three years

In recognition of *Vida Nueva*’s achievements, the Colombia Ministry of Health recognized Barranquilla as a national model city for diabetes care.

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The following organizations made the Vida Nueva project possible in Barranquilla, Colombia:
GESTATIONAL DIABETES: 
Its Global Impact on Maternal and Child Health

Maternal and child health is an enduring public health priority around the world. Encouraged by the framing of the UN Sustainable Development Goals (SDGs), forward-thinking stakeholders are taking a more integrated approach, recognizing the interplay between maternal and child health, and communicable and non-communicable diseases (NCDs). NCDs, such as diabetes and hypertension, significantly complicate healthy pregnancies in the short term, as well as compound long-term health issues for both the mother and child.1

Gestational Diabetes Mellitus (GDM) is mainly a temporary form of diabetes that occurs during pregnancy, affecting 14 percent of expectant mothers worldwide.2 GDM is an underlying factor for maternal and newborn morbidity and mortality. Babies born to mothers with uncontrolled GDM are likely to be excessively large, a condition known as macrosomia, which leads to prolonged or obstructed labor and increases the risk of profuse bleeding post-delivery.2 GDM also increases the risk of stillbirths, pre-term births, birth defects, and other neonatal complications.1

An Overlooked Opportunity to Improve Maternal and Child Health

Timely diagnosis and treatment of GDM offers an opportunity to improve maternal health and pregnancy outcomes. The impact of GDM extends far beyond pregnancy: About 50 percent of mothers with GDM develop type 2 diabetes within five years1, and if they are not treated, their children are up to 8 times more likely to develop type 2 diabetes later in life.4

For the long-term health of mother and child, GDM also offers a window of opportunity. Treatment during and after pregnancy can delay or even eliminate the onset of type 2 diabetes for the mother.5 For the child, successful treatment of the mother’s GDM also reduces intergenerational transfer of type 2 diabetes and other NCD risk factors.1

Universally, expectant mothers want the best possible health for their baby. This heightened state of health alertness creates a unique opportunity to impact long-term health by addressing GDM. GDM is, as a first step, managed through improvements in nutrition and exercise, which makes it a unique opportunity for intervention. The mother’s increased receptiveness can create healthier lifestyle habits that last a lifetime.

Diana Torrecilla Villarreal. As a participant of the Vida Nueva project, Diana was diagnosed with GDM.
High Economic and Disease Burden

Unfortunately, GDM, like other major NCDs, receives little attention throughout many low- and middle-income countries. **NCDs account for a disease burden of 50 percent in low- and middle-income countries, yet only receive 1.2 percent of development assistance for health.**

The lack of attention to prevent and treat NCDs, including GDM, costs countries an average of $2.3 trillion USD in lost economic output yearly and $500 million USD from diabetes alone. According to the World Health Organization (WHO) Global Action Plan, “the cost of inaction on NCDs outweighs the costs of action for any country in the world.”

Evidence suggests that investing in screening and treating GDM during and after pregnancy pays for itself in lower healthcare costs overall. This conclusion is supported across diverse settings – from India, where GDM affects 9.1 percent of pregnancies, to Israel, where it affects only 2.6 percent.
THE CHALLENGE:
The Cycle of Inaction on Gestational Diabetes

The lack of attention to GDM is often rooted in self-reinforcing challenges. Such challenges were present in the city of Barranquilla, Colombia in 2009, at the time the Vida Nueva project was conceived (see Figure 1):

1. **Low awareness and prioritization of GDM.** The general public was largely unaware of GDM, its prevalence and its serious impact.

2. **Outdated standards of care.** GDM was not recognized as an important maternal and child health issue. Fragmentation amongst maternal health disciplines had resulted in obsolete and neglected standards of GDM care.

3. **Insufficient diagnosis and treatment.** Lacking prioritization and standards—and facing ongoing healthcare cost constraints—physicians rarely tested for, diagnosed and holistically managed GDM.

4. **Disempowered patients.** Pregnant women generally did not know about the risks of GDM, request screening, or know how to manage the condition.

5. **Scarce data.** Evidence on the impact of GDM was not captured, making it difficult to effect changes in public health priorities and practices in GDM treatment.

The coverage and quality of GDM care varied considerably around Colombia, and proper standards of care were not being followed. Without compelling data, GDM remained a low priority on the public health agenda. **A catalyst for change was needed to break the cycle of inaction on GDM.**

"In 2011, Colombia’s maternal mortality rate was more than 50% above the Millennium Development Goal target."
— United Nations Development Program

Figure 1: Cycle of Inaction on Gestational Diabetes in 2009 Barranquilla

Colombia and Barranquilla in Basic Numbers

**Colombia**
- Population of Colombia: 47.6 million (2014)
- Model of Healthcare: Universal Coverage
- Maternal mortality rate: 39.9/100,000 (2014)

**City of Barranquilla**
- Population of Barranquilla: 1.4 million (2014)
- Public beneficiaries: 725,000 (2014)
- Public health insurers: 7
- Private health insurers: 14
- Caminantes: 442

Note: Barranquilla has piloted a system of community health workers (Caminantes) that is unique in Colombia. They aim to improve public health through what they call "induced demand" for medical services.

Sources: DANE/ Secretary of Health, Barranquilla, Colombia
BREAKING THE CYCLE:
A “New Life” for Families in Barranquilla, Colombia

In 2009, the Mayor’s office of Barranquilla, along with a Barranquilla-based non-profit group, Centro de Investigación Sanitaria (CIIS), became the catalyst needed to break the cycle of inaction.

The Barranquilla Mayor’s office and CIIS brought together a number of local and international actors united by their concern for pregnant women impacted by GDM, including the World Diabetes Foundation, Steno Diabetes Center, and Novo Nordisk, a global healthcare company. They worked to design and secure funding for an innovative local approach to integrate GDM diagnosis and treatment into prenatal care for the city’s most vulnerable population.

In 2011, Vida Nueva launched an ambitious plan to tackle every part of the cycle in a three-year project. At its heart, the collaboration of public, private and nonprofit actors aimed to:

1. **Build awareness**: Enhance public awareness of GDM and make GDM an integrated part of holistic prenatal care.

2. **Establish standards of care**: Mandate consistent public health standards for diagnosis and management of GDM during prenatal care.

3. **Increase quality of care**: Build capacity of healthcare professionals to diagnose and treat GDM, thereby improving prenatal care quality.

4. **Improve patient support**: Educate pregnant women on GDM risks and actively support them in creating healthier lifestyles during pregnancy and beyond.

5. **Generate evidence**: Proactively build a public evidence base to support better GDM care.

Through a broad coalition of local, national and international stakeholders, Vida Nueva has met or exceeded nearly all its targets in only three years. The commitment of these cross-sector actors transformed a small, limited pilot into an enduring and successful program for all of Barranquilla.

A Brief History Of Vida Nueva

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2009</td>
<td>Local and global stakeholders begin discussing models to address GDM challenges</td>
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<tr>
<td>2010</td>
<td>World Diabetes Foundation &amp; Novo Nordisk fund Vida Nueva for three years</td>
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<tr>
<td>2011</td>
<td>Vida Nueva project launched through cross-sector coalition; work begins to improve GDM standards of care</td>
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<tr>
<td>2012</td>
<td>GDM standards of care finalized and communicated through awareness campaigns; provider training &amp; universal screening</td>
</tr>
<tr>
<td>2013</td>
<td>Barranquilla recognized by Colombia Ministry of Health as an “Area of Demonstration” for diabetes</td>
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<tr>
<td>2014</td>
<td>Learning Study to capture lessons from the successful first three years</td>
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Alexandra Nunez with her son. Alexandra was diagnosed with GDM.
KEY ACHIEVEMENTS:

Measurable Impact

*Vida Nueva* delivered impressive achievements in just three years:

- Successfully established a standard of care for GDM, adopted as the required norm for Barranquilla’s 700,000 publicly insured citizens.

- GDM screening rate of 97 percent vs. 5 percent three years ago.

- Increased GDM diagnosis by a factor of 50 (from 0.2 percent in 2012 to nearly 9 percent in 2014)

  Indicative data shows that nearly one-third (29%) of the women diagnosed did not have any risk factors for GDM.

- Trained 225 physicians (OB/GYN, Primary Care) on GDM standard of care, achieving 78 percent compliance despite high staff turnover.

- Built awareness of GDM, other NCDs and healthy living for more than 80 percent of all pregnant women within the public health system. A group of doctors and nurses noted: “Vida Nueva has helped the majority of women here. After the first GDM test, many women follow the nutrition advice and improve diet within 15 days.”

- A key medical expert observed, “Pregnant women see the benefit of Vida Nueva and are talking to each other about it. They are learning how to eat properly while preventing excessive weight gain and learning basic exercise routines.”

- Women also recognize the positive impact of Vida Nueva. As one patient shared, “When I don’t eat food with sugar and eat less bread, my body feels better.” Another woman added, “We have learned that we need to take care of our lives. Life is beautiful…and we want to keep moving forward.”

Lastly, local health department leaders credit Vida Nueva for building public momentum for its “Barranquilla Healthy Living” initiative, improving the public health provider’s broader prenatal care process and fostering collaboration on health initiatives.

*With Vida Nueva, Barranquilla has demonstrated that an investment in the infrastructure of a hospital system results in a marked improvement in the quality of care for our community.*

—*Elsa Noguera De la Espriella, Mayor of Barranquilla*
VIDA NUEVA’S SHARED VALUE APPROACH:  
Galvanizing Diverse Stakeholders for Powerful Action

*Vida Nueva* achieved its objectives through a relatively small investment that catalyzed a big change. At its core, *Vida Nueva*’s success was driven by a dedicated, two-person project management team supported by part-time educators and specialists.

With the leadership of the Barranquilla Mayor’s office, this core team progressively mobilized a robust ecosystem of volunteer professionals bringing diverse knowledge, expertise and resources. The group of stakeholders included experts from professional organizations and local universities, insurers, NGOs, public providers, and the government. Each brought unique capabilities to create, implement and enforce a new holistic GDM standard of care throughout the public health system (see Figure 2). Their contributions ultimately improved the quality of life for thousands of Barranquilla’s most vulnerable pregnant women—impact that is being sustained into the future.

“*Vida Nueva has trained our health professionals on the proper care of GDM, and has also taught the vulnerable population of Barranquilla’s pregnant women an effective way to prevent GDM. With Vida Nueva, we have improved the quality of prenatal care in Barranquilla.*”

— Dr. Humberto Mendoza Charris, Project Manager, Vida Nueva

**Vida Nueva Core Team**—Project Management, Educators, Communicator

Five committees organize stakeholder capabilities with Vida Nueva’s five goals. The core team facilitates each committee, stakeholder engagement and accountability, and decision-making.

**Steering Committee**—Set vision and direction

**Scientific Committee**—Develop standards of care

**Communications Committee**—Drive awareness campaign

**Training Committee**—Develop educational materials

**Research Committee**—Coordinate GDM research

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**Figure 2:** Shared Value—Stakeholder Contributions to *Vida Nueva* and Value Gained in Return

| **Government** | Local enforcement of guidelines | Improved Health for Mother and Child |
| **Private Sector** | Knowledge and financial resources | Recruiting and supporting pregnant women for project |
| **Foundation and NGO** | Knowledge, admin and financial support | Improve outcomes and reduce long-term healthcare costs |
| | Guidance, best practices, global experts | Logistics support, health system infrastructure, health services |
| | Increased awareness of GDM | Improved prenatal care and quality control processes |
| | Basis for future projects and research | Guidance, expertise and credibility |
| | | Student volunteer participation |
| | | Access to more GDM data |
| | | Raise professional profile |

**Contributions to Vida Nueva**

**Value to Stakeholder**
How Vida Nueva Broke the Cycle

Details on how Vida Nueva broke the cycle of inaction offer insightful lessons for others seeking to take action on GDM.

1 Built awareness of GDM and encouraged holistic prenatal care: Vida Nueva continuously focused on creating broad public awareness of GDM, its risks, and the importance of leading a healthy lifestyle. The project team used an elaborate communication strategy to reach individual target audiences in culturally relevant ways (see Figure 3 and a case study on “The Super Baby” on the next page). Its mass-media campaign educated the public. It also helped recruit key champions by messaging specific value propositions for the government and the public health community thereby enabling universal screening.

2 Established a standard of care: A central achievement for Vida Nueva was establishing holistic GDM diagnosis and management guidelines. Their subsequent adoption by the local government as the official standard for Barranquilla ensured sustainable impact.

To improve GDM detection, the guidelines—the first of their kind in Colombia—mandated universal screening and diagnosis, as recommended by the International Association of the Diabetes and Pregnancy Study Groups (IADPSG). This was a significant change from the previous approach, which used an outdated testing method to only screen high-risk women. Universal screening turned out to increase GDM detection by 36 times in Barranquilla. The guidelines also sought to improve the treatment of GDM for diagnosed women by setting standards for nutrition, physical activity, and pharmacological intervention. They emphasized important specialist visits in the prenatal care process, promoting holistic care for pregnant women with GDM.

The guidelines were drafted over several months by the Vida Nueva Scientific Committee, a volunteer group of medical experts and health scholars, and involved both government and public health providers to gain their support and, eventually, their official endorsement.

3 Increased quality of care through capacity building: Vida Nueva focused on capacity-building for health workers and on changing prenatal care processes in health facilities. Through close collaboration with Barranquilla’s public health provider, complementary training for health professionals was launched. This helped the entire system understand the new standard of care and the importance of holistic care and healthy living in fighting GDM. The training has been delivered through more than 45 sessions for 920 health workers across all levels of care.

Figure 3: Communication Strategy

<table>
<thead>
<tr>
<th>Message Objectives</th>
<th>Media</th>
<th>Target Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create awareness of GDM and healthy lifestyles</td>
<td>Vida Nueva 45 press releases</td>
<td>Pregnant Women</td>
</tr>
<tr>
<td>Communicate impact of new GDM guidelines and drive motivation</td>
<td>12 TV news releases and 2 commercials</td>
<td>Health Workers</td>
</tr>
<tr>
<td>Establish credibility and generate interest in Vida Nueva to recruit support</td>
<td>18 radio announcements</td>
<td>Experts</td>
</tr>
<tr>
<td>Strengthen policymaker support by raising awareness, establishing credibility, and demonstrating alignment with city’s health initiatives</td>
<td></td>
<td>Government</td>
</tr>
<tr>
<td>Educate on health issues related to GDM and dispel cultural myths</td>
<td></td>
<td>General Public</td>
</tr>
</tbody>
</table>
Simultaneously, Barranquilla’s public health provider agreed to adapt prenatal care processes to promote higher quality, integrated maternal care, which included GDM. In addition to universal screening, the provider incorporated:

- specialist visits into its prenatal care process;
- quality control processes to ensure adherence to the new standard of care;
- community health workers as key influencers for appropriate care-seeking for pregnant women;
- technology updates to reduce risk of human error.

Improved holistic patient support: An important component of Vida Nueva was providing patients with personalized health education and support. Vida Nueva created education workshops to equip all pregnant women in Barranquilla with basic knowledge about GDM and other pregnancy risks. The workshops highlighted the importance of good nutrition, physical activity and mental health in improving their own health and the health of their baby. Additional education was offered to women diagnosed with GDM, providing in-depth information and personalized guidance from staff, including nutritionists, health workers, physical therapists and psychologists.
**Vida Nueva** staff and community health workers worked hand-in-hand to support pregnant women throughout the entire prenatal care process. **Community health workers played a vital role,** not only to encourage women to attend workshops and keep their doctor’s appointments, but also to **address cultural, administrative and socio-economic barriers to access care.** For instance, women unable to attend group workshops received training and support in their own homes.

1. **Built a local evidence base for GDM action:** *Vida Nueva* enabled GDM testing of over 21,000 pregnant women. 1,853 (or approx. 8.8 percent) women were diagnosed with GDM. Indicative data shows that nearly one-third (29 percent) of the women diagnosed did not have any risk factors for GDM. Although this kind of prevalence data has not yet been analyzed as part of a formal clinical study, in the absence of other data it has been made available to local policymakers to shape local and national health policy. *Vida Nueva* also hopes that researchers will use the available data to influence policy and investments to support GDM diagnosis and treatment.

**Significant Value from a Small Investment**

The *Vida Nueva* shared value approach has been able to leverage a small catalytic financial investment to deliver an enduring and broad-reaching impact. Funding enabled a dedicated core team to focus on identifying and articulating a shared value proposition to mobilize all actors. **The total value in terms of volunteer contributions of time, expertise and logistical support easily multiplies the seed investment many-fold.** Key to the sustainability of the collaboration was the shared value proposition—all stakeholders received different, but compelling benefits by contributing to the ecosystem.

**Next Steps for Vida Nueva**

As the initial three years of pilot funding ended in late 2014, *Vida Nueva* has accomplished or exceeded many of its objectives to break the cycle of inaction on GDM.

Yet, *Vida Nueva* continues as an institutionalized approach with local ownership that will provide benefits for many more pregnant women and their children. Its initial investment in stakeholder engagement, standards of care creation, tool development and embedded processes promote continuity and sustainability of impact. **Even without additional funding, local stakeholders remain highly committed to the program and plan to continue their work in support of women with GDM.**

Looking to the future, *Vida Nueva* plans to strengthen capability for post-partum follow-up of GDM-diagnosed mothers and their children. Additionally, the *Vida Nueva* core team is working to tabulate data captured within the public health system to encourage future studies on epidemiology and care efficacy. In Barranquilla, municipal authorities intend to expand implementation of the standard of care beyond the public health system to reach the 36 percent of Barranquilla’s citizens who are privately insured. Finally, influenced by Barranquilla’s successes, the Ministry of Health of Colombia is leading efforts to establish a national standard of care for GDM.

Although local and national circumstances vary, *Vida Nueva*’s shared value approach is worthy of consideration for local adoption, in Colombia or elsewhere around the world.


Women with GDM learn how to exercise at the Simon Bolivar clinic, Barranquilla, Colombia.
ADVANCING MATERNAL & CHILD HEALTH WITH GDM

Five Steps to Breaking a Global Cycle Locally

GDM is a serious health issue throughout the world and the case study of Vida Nueva is important to inspire further integration of GDM into maternal and child health care. Stakeholders, driven by the UN Sustainable Development Goals, are recognizing the significance of an integrated approach to tackling such health issues. GDM presents a unique window of opportunity to improve maternal and newborn health in the short term, while reducing the growing NCD epidemic in the long term.

Vida Nueva demonstrates that, even with a relatively small catalytic investment, it is possible to mobilize stakeholders to make sustainable advances in maternal and child health by improving standards of care. The shared value approach brought a high standard of GDM care into prenatal care services for tens of thousands of vulnerable women; hopefully, in the long run, this will reduce the risk of the intergenerational transfer of NCDs.

“The Vida Nueva project—the first of its kind in the country—led to the development of clinical practice guidelines for gestational diabetes. It will undoubtedly generate a positive impact for maternal and newborn health in Colombia, allowing for timely diagnosis and appropriate treatment of diabetes in pregnant women, as well as health promotion, disease prevention, and changes in lifestyle for this vulnerable population.”

—Dr. Rodrigo Restrepo, Division of Non-Communicable Diseases, Ministry of Health, Colombia

Five Principles to Consider when Establishing a GDM Project

Vida Nueva’s approach could inspire policymakers, healthcare providers or other stakeholders seeking to tackle GDM and NCDs in other regions of the world. Five principles learned provide useful guidance.

1. **Universal screening is key**: The Vida Nueva project demonstrated that unless universal screening is applied, as many as 1/3 of women with GDM could go undetected. A pregnant woman could easily have GDM without presenting any risk factors.

2. **Integrate GDM screening and care into maternal and child health services**: Making GDM screening and management an integral part of maternal and child health services increases the likelihood that all women will be screened and, if necessary, receive proper treatment for GDM.

3. **Engage community health workers**: Community health workers can play a crucial role with regards to raising awareness, making referrals for screening, and following up after diagnosis, thereby ensuring higher compliance is achieved.

4. **Empower pregnant women**: Knowledge is power and the first step to change. Informing pregnant women about GDM and its consequences, as well as the positive impact of lifestyle changes, empowers pregnant women to take control over their own health and that of their baby.

5. **Mobilize diverse stakeholders around a shared value proposition led by a strong local team**: Foster engagement by identifying and clearly communicating the contributions that different partners can make, and the value they can gain from a GDM initiative.
We thank the following sources for their input and time during the course of the *Vida Nueva* project assessment.

**Primary Sources—Interviews**

- Dr. Humberto Mendoza, Vida Nueva Project Manager
- Carlos Ricaurte, CIIS
- Carlos Ricaurte, CIIS
- Lia Villalobos Jalkis, Vida Nueva
- Dr. Eloina Goenaga, Barranquilla Mayor’s Office
- Cielo Rodriguez, Barranquilla Mayor’s Office
- Maria Amador Guerrero; IPS Universitaria de Antioquia
- Lucila Cardenas, IPS Universitaria de Antioquia
- Dr. Luis Lopez, IPS Universitaria de Antioquia
- Lissette Mancera, IPS Universitaria de Antioquia
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- Dr. Jorge Rodriguez, Universidad Simon Bolivar
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- Dr. Joaquín Armenta, Asociación Colombiana de Endocrinología
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- Diana Lopez, Mutual Ser
- Dr. Rodrigo Restrepo, Ministry of Health, Colombia
- Dr. Fernando de la Hoz, National Institute of Health, Colombia
- Dr. Rafael Chaves, Novo Nordisk Colombia
- Dr. Mauricio Garcia, Novo Nordisk Colombia
- Dr. Ruben Puche, Novo Nordisk Colombia
- Jens Aagaard-Hansen, Steno Diabetes Center
- Ane Bonde, Steno Diabetes Center
- Dr. Peter Damm, University of Copenhagen
- Dr. Jaako Tuomilehto, University of Helsinki

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**Cited Secondary Literature:**

10. Note on compliance: Rate of compliance is measured through a monthly auditing process of physicians in the public health system in Barranquilla. The clinical history for each pregnant woman is reviewed to ensure the criteria for testing GDM have been met.
About Accenture Development Partnerships
Accenture is a global management consulting, technology services and outsourcing company, with more than 305,000 people serving clients in more than 120 countries. Accenture Development Partnerships collaborates with organizations working in the international development sector to help deliver innovative solutions that truly change the way people work and live. Its award-winning business model enables Accenture’s core capabilities—its best people and strategic business, technology and project management expertise—to be made available to clients in the international development sector on a not-for-profit basis.

“The project directly addresses some of the most pressing needs of patients. The work is of broad significance for all regions demonstrating that targeted patient support services can directly drive marked improvements in patient outcomes and shows promise to lower overall healthcare costs for a population.”

— Jeff Elton, Ph.D., Patient Health and Predictive Health Intelligence Lead, Accenture Strategy

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About the Alcaldía de Barranquilla (Municipality of Barranquilla)
Barranquilla, located in the northern region of Colombia, is the fourth largest city in the country. It has been recognized as a leader in innovative health and education models in Colombia.
Website: http://www.barranquilla.gov.co
Twitter: @alcaldiabquilla

About The World Diabetes Foundation
The World Diabetes Foundation is an independent trust dedicated to the prevention and treatment of diabetes in the developing world.
Website: www.worlddiabetesfoundation.org
Twitter: @WorldDiabetesF

About Novo Nordisk
Novo Nordisk is a global healthcare company with more than 90 years of innovation and leadership in diabetes care. Changing Diabetes® is our commitment to improving life for people with diabetes. This means developing and delivering individualised treatments and advocating for better healthcare for everyone. Sharing good practices from projects around the world, like the Vida Nueva project in Colombia, is part of our efforts to improve access to diabetes care globally.

Headquartered in Denmark, Novo Nordisk employs more than 41,500 employees in 75 countries, and markets its products in more than 180 countries.
Discover more about Novo Nordisk and our Changing Diabetes® initiatives at:
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