



Diabetes in the  
Hispanic/Latino(a)  
Community:  
Four Case Studies





## Module 2: Four Case Studies\*

This is the second of two modules exploring Hispanics/Latinos(as) living with diabetes in the U.S. The goal of this series is to raise awareness of health inequities and provide population facts, cultural insights and potential solutions to assist health care providers in taking concrete actions to close Hispanic/Latino(a) health disparities.

This module shares four case study examples from each of the four diasporas of the Hispanic/Latino(a) community. These case studies are intended to educate providers and create inclusive conversations regarding health inequities. It is our aim to create solutions leading to positive change by reducing Hispanic/Latino(a) health disparity-related gaps.

Eighty percent of health outcomes are attributed to social, behavioral and environmental factors, known as social determinants of health (SDOH), which disproportionately impact underserved, low-income populations.<sup>1</sup> COVID-19 exacerbated issues related to SDOH, bringing health equity into the limelight in 2020.

1. <https://www.himss.org/resources/social-determinants-health#Part2>

# 1.

## CASE STUDY U.S. AND MEXICO



# ROSA FUENTES

**Age:** 69

**Occupation:** Retired

**Family:** Widow, mother of three adult children and seven grandchildren

- She was recently diagnosed with prediabetes at her annual wellness check-up; no other health issues were detected.
- Her fasting glucose level was 110.
- Her weight is within the healthy BMI range for her height.

## Overall Routine

Rosa is a retiree who lost her husband last year to cancer. Sometimes she cares for her grandchildren during the week if her children have to work late or travel for work.

- Each morning, Rosa has breakfast and then goes to mass.
- After mass she usually walks her dog.
- She always cleans her house, just in case she has family over.
- She takes the water aerobics class at the local YMCA twice a week.
- During the day, if she is not caring for her grandchildren, she reads, prays or talks with her neighbors.
- She sometimes drives her elderly neighbors to the grocery store or medical appointments. She says it gives her something to do.
- She always has a home-cooked meal for lunch and dinner. She does not like to eat out, only on Sundays after mass with her children and grandchildren.

## Barriers to Well-Being

- The loss of her husband has made her feel alone. She misses their evening talks before bedtime. She stated evenings are so hard for her, and she is dreading the winter months. Feeling sad makes her want to sleep during odd hours of the day.
- She does not value speaking with a grief counselor and has the belief that God will heal the pain and help her adjust to her new normal.
- Limited times for seniors at the YMCA restricts the amount of exercise she has during the week.

## Diabetes Management and Chronic Condition

- Rosa was recently diagnosed with prediabetes.
- Doctor's staff provided her with a printout of the American Diabetes Association (ADA) recommendations of 15 servings a day of carbohydrates.
- She stated that the majority of foods listed are not foods she typically eats, and she does not understand why healthy foods like fruit and vegetables are on the list of carbohydrates.



## Hobbies

- › Attends Catholic mass every morning
- › Prior to COVID-19, exercised at the YMCA at least twice a week but has not been in months
- › Cooks for her children, grandchildren and other family members
- › Walks her small dog, Snoopy, at least once a day



## Rosa's typical diet

- › **Breakfast**
  - Oatmeal with honey and raisins
  - Whole wheat bread with peanut butter
  - Freshly squeezed orange and carrot juice
- › **Lunch**
  - Mexican rice (fried with tomato sauce)
  - Beans (pinto, canary, black)
  - Tacos (chicken, steak, lengua [beef tongue], or pork [al pastor or carnitas style]) with cilantro and onion
- › **Dinner**

Caldos (stews/soups that contain chicken, beef, oxtail, fish, carrots, green beans, potatoes, onions), calabazitas (squash) and rice

  - Nopales (cactus) with tomatoes, cilantro and onions, eaten with tostadas
- › **Favorite Drinks**
  - Horchata (rice, condensed milk, cinnamon)
  - Aguas frescas (puréed fruit, water, sugar); flavors may include limón (lime), jamaica (hibiscus) and tamarindo (tamarind)
- › **Dessert**
  - Flan and gelatina (gelatin)





## Goals, Observations and Recommendations for Improving Overall Health

<b>Diet Recommendation</b>	<ul style="list-style-type: none"><li>› Reduce sugar consumption.</li><li>› Substitute water for traditional sugary beverages, such as aguas frescas.</li><li>› Substitute horchata (rice water) with steel-cut oatmeal water (leave steel cut oats in water overnight in the fridge, and in the morning drain the oats and drink the water that is left over).</li><li>› Substitute flan and gelatin with fruits that have an edible skin, such as fresh papayas, mangoes, guavas and figs. Avoid preparing street-food style, which may include added sugars.</li><li>› Substitute starchy vegetables, such as corn, with non-starchy vegetables, such as carrots and greens.</li><li>› Substitute brown rice for traditional white rice.</li></ul>
<b>Physical Activity</b>	<ul style="list-style-type: none"><li>› Include walks on days when the weather is permitting.</li><li>› Purchase exercise equipment to use during the days she cannot attend the YMCA. (If unable to purchase, she can substitute normal household items, such as soup cans and milk jugs, for strength training exercises).</li><li>› Try to increase her exercise to five days a week and at least 30 minutes each session.</li><li>› Find local exercise classes in the community beyond the YMCA, such as SilverSneakers.</li></ul>
<b>Mental Health</b>	<ul style="list-style-type: none"><li>› Find a therapist of the same cultural background.</li><li>› Schedule an appointment with a grief counselor to discuss her loneliness and potential depression.</li></ul>
<b>Other</b>	<ul style="list-style-type: none"><li>› Determine if she has any retiree benefits from previous employer that may include access to a health coach or case manager.</li><li>› Schedule check-ups with her doctor every three months.</li><li>› Seek out church groups to help support her during times of loneliness.</li><li>› Volunteer at local agencies to give back to her community.</li><li>› Connect with local resources, such as an Elderly Affairs Committee.</li><li>› Because family, and feeding them, is very important to her, find traditional foods that are healthier rather than try to overhaul her diet to make it more mainstream American.</li></ul>



# 2.

## CASE STUDY CENTRAL AMERICA - PANAMA



## ELIZABETH RIOS

**Age:** Mid-40s

**Occupation:** Office worker

**Family:** Mother to school-aged children

- She has difficulty balancing work and home life.
- She was diagnosed with diabetes a couple of years ago and hasn't had time to see the doctor for regular check-ups.
- Her A1C was out of the desired range when she was diagnosed; however, she has not rechecked it since.



## Overall Routine

Elizabeth works full time as an administrator in a large company. The job is steady and provides income and benefits for her and her family. It's located in a city, so she must commute by car every day, which takes about 45-60 minutes each way.

- Before work, she must get up and get her school-aged children ready to catch the bus. The kids are young enough where they still need a bit of management to get out the door (e.g., help with getting up, finding appropriate clothes, remembering to brush teeth, etc).
- Breakfast needs to be quick, so typically it is cream of wheat or a tortilla with cheese.
- Elizabeth works normal business hours (9:00 am-5:00 pm), and then commutes home, often experiencing rush hour traffic delays.
- She typically packs lunch so she can enjoy her traditional foods as well as save time on her break.
- Her aging parents live nearby, so the children are able to get off the bus and be cared for by their grandparents while she works a full day.
- She picks up her children at her parents' house, where they've prepared traditional Panamanian foods for dinner; then they eat together.
- She goes home with her children.
  - She checks in with them on homework, and helps them prepare for assignments or upcoming school projects.
  - She then helps them with their bedtime routine.
- After the kids are in bed, she watches TV before she falls asleep.
- Saturdays are typically free for her and her kids; Sundays are spent at church and then at her parents' house for traditional meals that stretch into the early evening.

## Barriers to Well-Being

- Lack of time for dedicated exercise.
- Traditional foods that are very meat heavy, fried and sugary, so needs include nutritional guidance on healthy substitutions.
- Lack of social support beyond extended family. (Although she has help from her parents with watching her kids when they get home from school, she is the primary caretaker and provider for her family).
- Little control over her diet since she eats with her parents when she picks up her children.

## Diabetes Management and Chronic Condition

- Since Elizabeth has not been to the doctor in some time, she is unaware of her baseline blood sugar levels. She should get her HgA1C checked as well as check her blood sugar at home, which will help her begin to recognize patterns.





## Goals, Observations and Recommendations for Improving Overall Health

### **Diet Recommendation**

- › Reduce meat and sugar consumption.
- › Substitute water for traditional sugary beverages.
- › Substitute fresh fish and ceviche for traditional meat meals.
- › Substitute brown rice for traditional white rice.

### **Physical Activity**

- › Because she works in a big office building, substitute taking the stairs for riding the elevator.
- › Dedicate time to walk at lunch (or other breaks) and park her car farther away from the entrance to increase steps during the day.
- › Because she lives in a relatively urban/suburban area, try to find a community center that has gym/fitness classes that she can attend on the weekend (e.g., a dance cardio class, Zumba or boxing) that may offer free or reduced-cost child care.

### **Mental Health**

- › She enjoys her children and her parents and spends most of her time with them.
- › She is valued at work, but it takes up a lot of her time.
- › She is very busy and doesn't feel she can block off time for herself while there.

### **Coaching Goals/ Recommendation**

- › Re-establish a relationship with a culturally sensitive provider.
- › Utilize her health coaching benefits through employer so she can have someone to check in with so too much time doesn't go by between provider visits and check-ups.
- › Get her A1C retested and see if her medical benefits cover a glucometer and testing strips.
- › Because food and family are very important to her, find traditional foods that are healthier rather than try to overhaul her diet to make it more mainstream American.



# 3.

## CASE STUDY CARIBBEAN - PUERTO RICO



# HECTOR DE LÉON

**Age:** Mid-50s

**Occupation:** Engineer

**Family:** Father to four school-aged children

- He was diagnosed with type 2 diabetes a couple of years ago and keeps failing at maintaining long-term, healthy lifestyle habits due to stress and low back pain from sitting at an office job.
- His A1C was 8.2 one year ago.

## Overview

Hector brought his family over from Puerto Rico five years ago as part of his job promotion. He works in an office as an engineer and does a lot of sitting during the day. His wife is not employed outside the home and does most of the caretaking, cleaning and cooking for the family. As a father of four and the only source of income, he is stressed about providing for his family. Hector and his family do not have any extended family nearby, so they do not have anyone they can steadily rely on to help with their children which causes strain and limits their free time.



### Hobbies

- › Bike riding with kids
- › Basketball once a week with friends
- › Family BBQs on the weekends



### Religion/Health Belief

His grandmother, who helped raise him in Puerto Rico, believed in Espiritismo. He considers himself Protestant but still values Espiritismo beliefs. He does not really believe in preventive care, only goes to the doctor if he feels sick.



### Mental Health

Hector has undiagnosed anxiety and depression, and he takes supplements to help his mood. He has not talked to a behavioral professional, though his primary care provider (PCP) has offered to refer him. He is not taking any mood stabilizers but has considered it. He is burdened with providing for his family while balancing a time-consuming job. His wife is supportive, but he doesn't feel connected with friends and family.

He is currently on metformin, but his doctor told him that if he doesn't stay compliant and figure out better stress management techniques, he may have to go on insulin. He has been more stressed since the last measurement and has been avoiding going to the doctor because he feels fine. He usually remembers to take his medications, but he is forgetful and sometimes goes without for a few days before getting a refill.



### Hector's Typical Diet

#### › BREAKFAST

- Scrambled eggs, peppers, mushroom, chorizo (Spanish or Mexican pork sausage)
- Fruit, such as papaya, mango, banana, berries
- Piece of toast
- Cremas with cinnamon and fruit
- Café con leche

#### › LUNCH

- Leftovers from dinner the night before
- Fast food, or will skip lunch

#### › DINNER

- Sofrito (peppers, onion, garlic and tomatoes cooked in olive oil) with fried chicken, fried fish or pork salad
- Cuchifritos (fried fish, beef, pork or chicken)
- Tostones (twice-fried plantains)
- Mofongo (plantains that are fried and mashed, usually containing chicharrones (pork belly and/or rinds)

#### › SNACKS

- Fresh fruit
- Plantain chips

#### › DRINKS

- Soda
- Fruit juice
- Beer
- Rum



---

## Barriers to Well-Being

- Potential undiagnosed/untreated history of depression and anxiety.
- Machismo or a strong sense of masculine pride.
- Doesn't believe in preventive care.
- Limited physical activity and exercise.

---

## Goals, Observations and Recommendations for Improving Overall Health

- Diet Recommendation**
- Avoid skipping meals to maintain consistent blood sugars.
  - Avoid eating fried foods every day, and save traditional fried foods for special occasions.
  - Reduce salt content and replace with fresh herbs or low sodium options. (Note: Adobo may be a typically used seasoning, but it is also high in sodium and should be used sparingly).
  - Increase his vegetable intake to cover half of the plate.
  - Avoid juice, alcohol and other sugary beverages unless it is on a special occasion.
  - Consider a low-fat dairy in his coffee.

- 
- Physical Activity**
- Given his diagnosis of type 2 diabetes, Hector should aim for at least 150 minutes of moderate to vigorous\* aerobic exercise spread out across at least three days during the week, with no more than two consecutive days between bouts of aerobic activity.
  - Stretch throughout the day to reduce low back pain, and not sit for more than 30 minutes at a time.
  - Continue to do physical activity with family (bike rides).

- 
- Condition Management**
- Find a provider whom he trusts and can manage him holistically.
    - See the doctor two times a year, and recheck A1C.
    - Follow best practice recommendations and measure four times a year, or every three months, to ensure blood sugars are staying within normal range.
  - Understand the importance of preventive care for condition management and fewer complications.
  - Assess barriers to taking medications.
  - Set goals for taking medications.
  - Understand the long-term impact of noncompliance.
  - See a dietitian.
  - See a therapist to learn better stress management techniques.

- 
- Mental Health**
- Explore cultural barriers to connecting with mental health professional and consider finding a therapist of the same cultural background.
  - Consider daily meditation before going to work to stay mindful and increase ability to focus.
  - Consider talking to a therapist to learn better stress management techniques.
  - Connect with friends and loved ones to reduce isolation.

\*Vigorous exercise refers to exercise where your heartrate is elevated for 20–30 minutes. Some examples may include high-intensity interval training (low or high impact) where you work at your max potential for 30 seconds and rest for 15 seconds (repeating 10–12 times), such as jumping jacks, running, burpees and box jumps (all high impact) or squats, lunges to leg lifts and push-ups (all low impact).

# 4.

## CASE STUDY SOUTH AMERICA - COLOMBIA



# JUÁN HERNANDEZ

**Age:** Late 50s

**Occupation:** Overnight shift worker, food service/hospitality industry

**Family:** Lives with his two adult sons

- He has difficulty balancing work and home life.
- He was diagnosed with diabetes 24 years ago.
- His A1C has been as high as 12.8 but currently is holding steady at 7.6.



## Overview

- Juan was diagnosed with diabetes 24 years ago. He sees his doctor for check-ups periodically and takes injectable insulin and oral medication to control his blood sugar levels. In the past, his A1C has been as high as 12.8 but he's currently maintaining a level of 7.6. He hopes to reduce it even further.



### Hobbies

- › Running
- › Cooking
- › Watching TV (mostly sports channels and Colombian cultural channels)

## Overall Routine

Juán works full time in room service (overnight server) at a large hotel. The job is steady and provides income and union benefits for him. It's located in NYC, so he must commute by bus every evening, which takes about 45 minutes each way. His shift begins at 10:00 pm and ends at 6:00 am.

- After returning from work at around 7:00 am he makes breakfast.
- Thirty minutes after breakfast, he goes to sleep and then wakes up at 4:00 pm.
- He makes lunch when he wakes up. Lunch typically consists of rice, beans, tostones (twice-fried green plantains) with chicken, beef, chorizo or pork chop.
- He showers and gets ready for work at around 7:00 pm.
- He walks to catch the bus at 8:30 pm.
- After arriving, he walks 25 minutes to the hotel.
- On lighter days, he delivers 7-10 meals to rooms overnight. During busier days, he can deliver 27-30 meals overnight.
- He typically takes a break to eat around 1:00 am; however, if he is busy with a lot of food deliveries, he doesn't eat until 3:00 am. His meals at work are usually high in carbohydrates, and if the food is not appetizing, he does not eat until he returns home or will have a Greek yogurt with fruit, plain fruit or coffee with a croissant.

- He has two days off during the week, Wednesday and Thursday. On these days, he exercises as much as possible (running in the morning and weight lifting in the afternoon).



### Juán's Typical Diet

#### › BREAKFAST

- Oatmeal
- Fruit (papaya, peach, banana)
- Eggs
- Avocado
- Multigrain bread

#### › LUNCH

- White rice
- Red beans
- Picadillo (ground beef)

#### › DINNER

- Fried fish
- Yellow (sweet) plantains (deep fried)
- Alberjas (green peas)
- Carrots

#### › SNACKS

- Papaya
- Lulo (naranjilla)

#### › DRINKS

- Aguardiente
- Refajo (beer with specialty Colombian soda called Colombiana)
- Whiskey
- Beer
- Wine
- Water

#### › DESSERTS

- Arroz con leche (rice pudding)
- Flan



## Barriers to Well-Being

- Lack of time/motivation/energy for dedicated exercise on a consistent basis.
- Food at the hotel is not very healthy.
- Traditional foods are very meat heavy, fried and sugary, so needs nutritional guidance on healthy substitutions.
- Reversed schedule makes it difficult to exercise or metabolize food due to sleeping during the day and being awake all night.
- Very little time for social connection. His days off are during the week, so difficult to socially connect.
- The only family support nearby are his two adult sons (23 and 21). His siblings all live in Colombia.

## Diabetes Management and Chronic Condition

- Juan was diagnosed with diabetes 24 years ago and sees his doctor for check-ups about every three months.
- Although his A1C has significantly improved over the years, it is still higher than recommended levels.

## Goals, Observations and Recommendations for Improving Overall Health

### Diet Recommendation

- Reduce intake of alcoholic beverage and focus on water.
- Work with dietitian to help increase his low-carbohydrate intake and decrease higher carbohydrate options.
- Substitute brown rice for traditional white rice.
- Prepare lunch that includes healthy, ready-to-eat snacks to take with him to work to avoid opting for unhealthier options, especially for busy room service delivery nights.
- Focus on low-fat, high-protein and high-fiber foods to help blood sugar stay steady over time; recommendations include whole grain toast, egg, and some fruit.

### Physical Activity

- Continue at least 20–30 minutes of exercise (running/jogging) a minimum of two times per week (as allowable by his schedule).
- Check blood sugar before and after exercise, and make sure blood sugar is less than 250 mg/dl (or within ranges that physician recommends) before exercising.
- Drink plenty of water, and be prepared for any episodes of low blood sugar. Have something available to bring sugar levels up, such as hard candy, glucose tablets or 4 ounces of juice.
- Wear proper shoes and socks to protect his feet.
- Consider wearing a step tracker on work days to see how much he is actually moving.
- Continue incorporating weight lifting for 45 minutes (2 times per week).

*Continued on next page*



## Goals, Observations and Recommendations for Improving Overall Health

### Mental Health

- › He is of sound mind.
- › He is valued and praised at work and is known as a hard worker. He is known as the manager's "go to" employee, but the days that are busy are very stressful.
- › Overall he enjoys the work he does. He likes working in the service industry but if others are not pulling their weight he has to pick up the slack which creates frustration.

### Coaching Recommendation

- › Continue regular visits with doctor and perhaps a nurse case manager so he can have someone to check in with to avoid infrequent, irregular check-ups.
- › Ensure he is familiar with employee assistance program (EAP) resources so he knows about them should he need them.
- › Find a provider with culturally similar background.
- › Since changing shifts at this time is not an option, work within the constraints of his schedule and maximize his rest and nutrition when feasible.

### Other

- › Because preparing and enjoying traditional foods with his children is very important to him, find traditional foods that are healthier while not eliminating the cultural dishes.

## Conclusion

There is not a one-size-fits-all approach to manage diabetes in the Hispanic/Latino(a) population. As we outlined, each diaspora or culture may have its own set of guidelines to help control illness. By asking questions, remaining curious and allowing patients to share their values, beliefs and perceptions, providers can gain a deeper understanding of their patients' cultures and are more likely to establish trust and rapport. It is our responsibility as health care providers to be customer centric and meet people where they are in their health journey. The more we can personalize health care, the more likely someone is to adhere to the plan to improve their health.

**Together, all the way.®**

All Cigna products and services are provided exclusively by or through operating subsidiaries of Cigna Corporation.  
954503 06/22 © 2022 Cigna. Some content provided under license.

