The 2025 Business Skills Olympics Case

White Plains Hospital has partnered with the African American Men of Westchester on the following case which has been developed from a 2022 study completed by Dr. Farrukh Nadeem Jafri, the Medical Director of *WPH Cares at White Plains Hospital* and Associate Professor of Emergency Medicine at Albert Einstein College of Medicine.

Strategies to Address Diabetes in Underserved Communities

Problem Statement

Diabetes continues to have a severe impact on underserved communities, exacerbating health disparities and systemic inequities. Factors such as limited access to healthcare, financial barriers, and social determinants of health prevent many individuals from receiving the care they need. Addressing these challenges requires innovative strategies that target these deep-rooted issues while ensuring long-term sustainability.

Context

To help guide your analysis, we have included findings from two recent studies that highlight systemic issues in diabetes care. The first study revealed that individuals living in poorer and more rural areas were significantly less likely to receive high-quality diabetes care compared to those in wealthier, urban areas. This demonstrates the need for targeted efforts to reduce geographic disparities and improve outcomes for underserved populations.

The second study found that increased insurance coverage alone was not sufficient to overcome disparities in diabetes management. Hispanic or Latino and non-Hispanic Black individuals were found to have worse blood sugar management (glycemic control) compared to non-Hispanic White individuals, even when they had insurance. Glycemic control refers to how well a person maintains their blood sugar levels within a healthy range. These findings highlight clear racial and ethnic disparities in care that persisted despite access to insurance, emphasizing the need for systemic changes to address these inequities.

In addition to these systemic challenges, poorly controlled diabetes has significant economic and workforce consequences. In 2022, the total estimated cost of diabetes in the U.S. was $412.9 billion, with $106.3 billion attributed to indirect costs such as lost productivity, absenteeism, and work disability. Individuals with diabetes often experience reduced productivity at work (presenteeism), costing $35.8 billion annually, while diabetes-related disabilities contribute $28.3 billion in lost productivity.

Absenteeism due to diabetes-related health issues adds another $5.4 billion to these costs. Furthermore, studies show that 19% of individuals with diabetes experience significant work disability, with many unable to work or missing numerous workdays due to health complications. These economic and human costs highlight the urgency of developing innovative and effective strategies to manage and prevent diabetes.

Potential Challenges, Opportunities, and Strategies

Challenges

- **Geographic Disparities:** Patients in rural and low-income areas face barriers to accessing high-quality care due to a lack of resources and infrastructure.

- **Racial and Ethnic Inequities:** Systemic factors disproportionately affect Hispanic or Latino and non-Hispanic Black individuals, making it harder for them to achieve effective diabetes management.

- **Limitations of Insurance:** Insurance coverage alone is not enough to address the complexities of diabetes care and the inequities that persist across racial and socioeconomic lines.

Opportunities

- **Targeted Interventions**: Addressing the unique needs of specific populations, including geographic and demographic targeting, could help bridge gaps in care.

- **Systemic Changes:** Addressing systemic inequities through policy changes, resource allocation, and innovative healthcare delivery models can improve long-term outcomes.

- **Creative Solutions:** Leveraging innovative technologies, community partnerships, and data-driven strategies presents an opportunity to create sustainable and equitable diabetes care systems.

Strategies

- **Expand Access Through Community-Based Care**
  Leverage community health workers (CHWs) and mobile clinics to provide diabetes education, monitoring, and direct support. CHWs can serve both clinical (e.g., doctors, nurses, dietitians) and non-clinical (e.g., social workers, patient navigators, advocates) roles, addressing social determinants of health and connecting patients with essential services.

- **Integrate Technology for Cost-Effective Management**
  Use telemedicine, remote patient monitoring, and digital tools to provide consistent, scalable diabetes care. These tools can help reduce barriers like transportation and increase access to care for underserved populations.

- **Advocate for Affordability and Equity**
  Propose policy initiatives to make diabetes medications more affordable, expand insurance coverage, and address social determinants of health, such as access to healthy food and reliable transportation.

- **Strengthen Preventive Care Initiatives**
  Focus on reducing diabetes prevalence through early intervention strategies like community education programs, school-based health initiatives, and workplace wellness campaigns. Financial institutions and private businesses can play a role by funding scalable programs or investing in prevention-focused startups.

Student Task

Choose a strategy to develop a presentation that addresses each of the following:

- **Key Barriers:** Identify the challenges your strategy will address.

- **Implementation Plan:** Provide a roadmap for rolling out the strategy. Include stakeholders such as healthcare providers, policymakers, and community organizations.

- **Financial Sustainability:** Outline potential funding sources (grants, partnerships, etc.) and demonstrate long-term cost reductions.

- **Impact Measurement:** Describe how you will evaluate success. Examples include:
  - Improved glycemic control (better blood sugar management)
  - Reduction in hospitalizations
  - Increased access to affordable medications.