

# Better Health through Connection: Case for Support for Diabetes Funding

January 28, 2021

## Introduction: *Stories matter and the human story matters most*

Hector thought his grandmother's tortillas were the best. He could still see her standing at the kitchen counter, her strong hands working the water, lard and flour. He listened as she softly hummed the folksongs of the Mexican village of her childhood. Hector's abuela loved making tortillas for her family and he loved eating them, maybe too much.



At forty-six Hector carried an extra fifty pounds. He felt tired most of the time and thirsty. He wasn't at the top of his game and life didn't turn out quite the way he envisioned; but, at least, he had never been robbed...until now.

Diabetes is a thief. It steals vitality, function, body parts, and, in many cases, life itself.

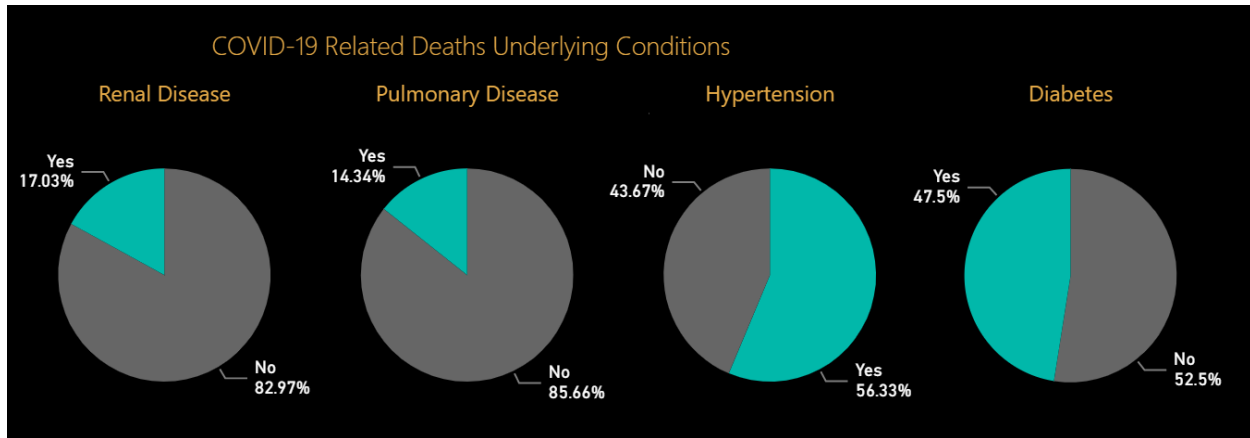
Diabetes is a bad actor; but it doesn't act alone. Bad choices contribute to the development and progression of the disease. And that suggests individual v. collective responsibility for altering the trajectory of diabetes.

When diagnosed, Hector felt isolated, powerless, vulnerable, scared...responsible.

Blaming the victim to excuse collective *inaction* is nothing new. For decades smokers were held solely accountable for the health consequences of tobacco use. But the problem with blaming and shaming is it rarely works.

For a disease with the seismic proportion of diabetes (over 13% of El Paso's adult population and over 10% of the nation's adults), relying on personal accountability to mitigate risk and control diabetes has limited potential for flattening the curve. The numbers are just too daunting. An estimated 83,000 El Paso adults have been diagnosed with diabetes and 220,000 are pre-diabetic. Any health problem of that magnitude demands community intervention, especially in the context of a pandemic.

The mortality risk status of diabetes is amplified by the COVID. Even without the co-morbid condition of COVID, diabetes poses a significant risk for premature death. With COVID that risk is near-term lethal. Of the 1,661 cumulative deaths from COVID in El Paso County, 47% had diabetes as an underlying condition. The mortality rate is consistent with studies from England that estimate individuals with Type 2 diabetes OR extreme obesity (>40 BMI) are twice as likely to die from COVID.



Source: [City of El Paso COVID-19 Cases | El Paso Strong \(epstrong.org\)](https://www.epstrong.org/covid-19-cases)

As these diabetes-COVID patients die, families are shattered. Adult children lose the wisdom and consult of parents with decades of experience. Grandchildren are raised without the personal interaction that would have connected them across generations. It's a steep price to pay.

Unlike many other life-robbing diseases with no known interventions that can lessen risk or control progression, the course of diabetes can be changed. Eating healthier, regular exercise, weight reduction can significantly reduce the likelihood of developing Type 2 diabetes AND can help control the disease after diagnosis.

If the solutions are straightforward and available for the taking, why so few takers? In a phrase...it's complicated. People inherit the habits and cultural preferences of their forebearers and are further molded by their current economic, social, emotional conditions. In other words, there is often a disconnect between knowing what needs to be done and doing what needs to be done.

And that's the dilemma. If it were just about curbing obesity-promoting eating behavior, a culturally-attuned focus group could recommend lower calorie options to lard-laden tortillas and super-sized portions. Folks with bad dietary habits would heed the message, change what and how much they eat. In turn, diabetes would be prevented or controlled.

If only it were that simple.

## **A Mission: A word picture that illustrates a better future**

*It is the long history of humankind (and animal kind, too) that those who learned to collaborate and improvise most effectively have prevailed.*

– Charles Darwin



Formed in 1995 from the sale of Providence Memorial Hospital to Tenet Health Corporation, the mission of Paso del Norte Health Foundation (PDNHF) is to lead, leverage, and invest in initiatives, programs and policies that promote health and prevent disease in the Paso del Norte region, the largest metro area along the US-Mexico border (Population of El Paso County is 836,000).

Though PDNHF allocates substantial resources to diabetes prevention, the scale of the problem exceeds the capacity of one health foundation and its local partners to address:

83,000 adults diagnosed with diabetes *PLUS*  
 68,000 adult pre-diabetics who are aware of their status *PLUS*  
 151,000 adult pre-diabetics who are unaware of their status

This Case for Support is to solicit co-investment by other foundations, corporations and individual donors in El Paso and across the country to help prevent and control diabetes in the greater El Paso area. The partnerships could extend the reach of evidence-based diabetes initiatives to all those with diabetes or at risk for the disease in the Paso del Norte region and provide a “learning laboratory” for preventing/managing diabetes in a high risk population.

El Paso County’s 83% Hispanic population (nearly all Mexican-American) provides a unique opportunity to test the effectiveness of diabetes programs in a catchment area where Hispanic residents represent all socio-economic strata AND have a common cultural heritage. Though much is known about how to prevent and control diabetes, there is still much to learn, especially about strategies for behavioral changes and the creation of “new” normals for diet and exercise.

Further, the Mexican-American cultural context of El Paso offers those with or prone to diabetes the health protection benefits of high social connection. Most residents are multi-generational El Pasoans with close family ties. Those families can help support difficult lifestyle changes as well as hold their members accountable for risk mitigation, e.g., reduction in portion size, regular glucose testing.

**A Problem: An opportunity to learn, care, and act**

There are an *estimated* 300,000 El Pasoans diagnosed or at-risk for diabetes. The numbers come from Behavioral Risk Factor Surveillance Survey (BRFSS) data. In lieu of a comprehensive case registry, El Paso (like most other communities) depends on BRFSS interview survey data to define/refine the scope of health problems. In addition, since the number of respondents in specific cohorts, e.g., younger working age adults, may not meet the required statistical threshold, several years of survey data must be aggregated to capture adequate sample size. Reliance on multi-year BRFSS data makes it difficult to assess whether any interventions in a given year make a difference in outcome.

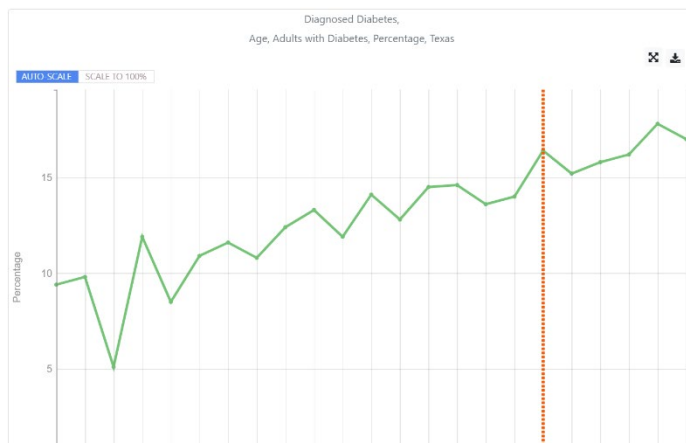
With the financial assistance from PDNHF, local hospitals, private physicians, and the health department, El Paso recently established a health information exchange (PHIX) to capture, share, analyze, and report health data. However, given its early stage of development and current resources, PHIX is focused on information sharing within its network v. population health data analysis and reporting.

Though subject to the above BRFSS limitations, the 2015-2019 data for El Paso County reveal a significant diabetes problem, especially among older working age and elderly residents.

El Paso County Diabetes: 2015-2019, Adults 18+			El Paso County Pre-Diabetes Diagnosis: 2015-2019, Adults 18+		
	Percent	Number		Percent	Number
<b>Total</b>	13.7%	<b>83,151</b>	<b>Total</b>	11.2%	<b>67,977</b>
Age: 18-44	2.2%	7,109	Age: 18-44	7.2%	23,373
Age: 45-64	21.0%	38,310	Age: 45-64	14.9%	27,182
Age: 65+	37.9%	37,730	Age: 65+	17.5%	17,422

Prior to its name change to Type 2, the most prevalent form of diabetes was called Adult-onset. Diabetes was often diagnosed at or near retirement age when work life was finished (or nearly over), the children raised, and Medicare available. Hence, the socio-economic fallout of diagnosis was lessened by age of the diabetic.

Over the last three decades Type 2 diabetes has increased in younger populations, especially in the older working age cohort (45-64). Unmanaged diabetes in this younger age group has significant societal costs. Children may still be at home and could lose the physical and emotional involvement of parents who are struggling with health effects of uncontrolled diabetes. Reduced income associated with long term disability could devastate the family. Premature death would leave the family without the guidance and support of a parent at a critical time in the children's social development.



Source: CDC Diabetes Surveillance. Diagnosed Diabetes, Texas, Age 45-64, 1994-2016.

Managing pre-diabetes and diabetes requires accessible clinical care and education services. El Paso has 16 Certified Diabetes Care and Education Specialists for a target population of over 300,000. Only a few community-based organizations, e.g., Federally-Qualified Health Centers, offer diabetes self-management and education programs. Hospitals provide aftercare education services but, typically, for their own patients. A handful of private physician practices offer diabetes self-monitoring/management instruction.

Related BRFSS data for 2015-2019 reveal problems with access to routine clinical services and diabetes education. Though over 90% of diabetics received physician care, 23% did not have an A1C test in the last year and 80% did not have a doctor check their feet. And there were problems with self-care as well. Thirty-nine (39) percent of the diabetics did not check their sugar daily and 56% did not check their feet daily. Regular clinical and self-care is especially important given that 33% of the adults with diabetes are insulin dependent. Finally, 52% of the adult diabetics had never taken a diabetes education course...an estimated 43,000.

**M**aria had always struggled with her weight. After the birth of her second child, she expected the pounds to peel off, especially with breastfeeding. But the pounds resisted. She retained the pregnancy weight then added to it. A year later she noticed a darkening of the skin around her neck. Maria felt tired all the time, not just when the baby awakened her in the middle of the night. Her doctor ordered an A1C series. At 5.8% Maria was pre-diabetic AND afraid. She always thought her weight was just her problem; but now it weighed on her young family, as well.



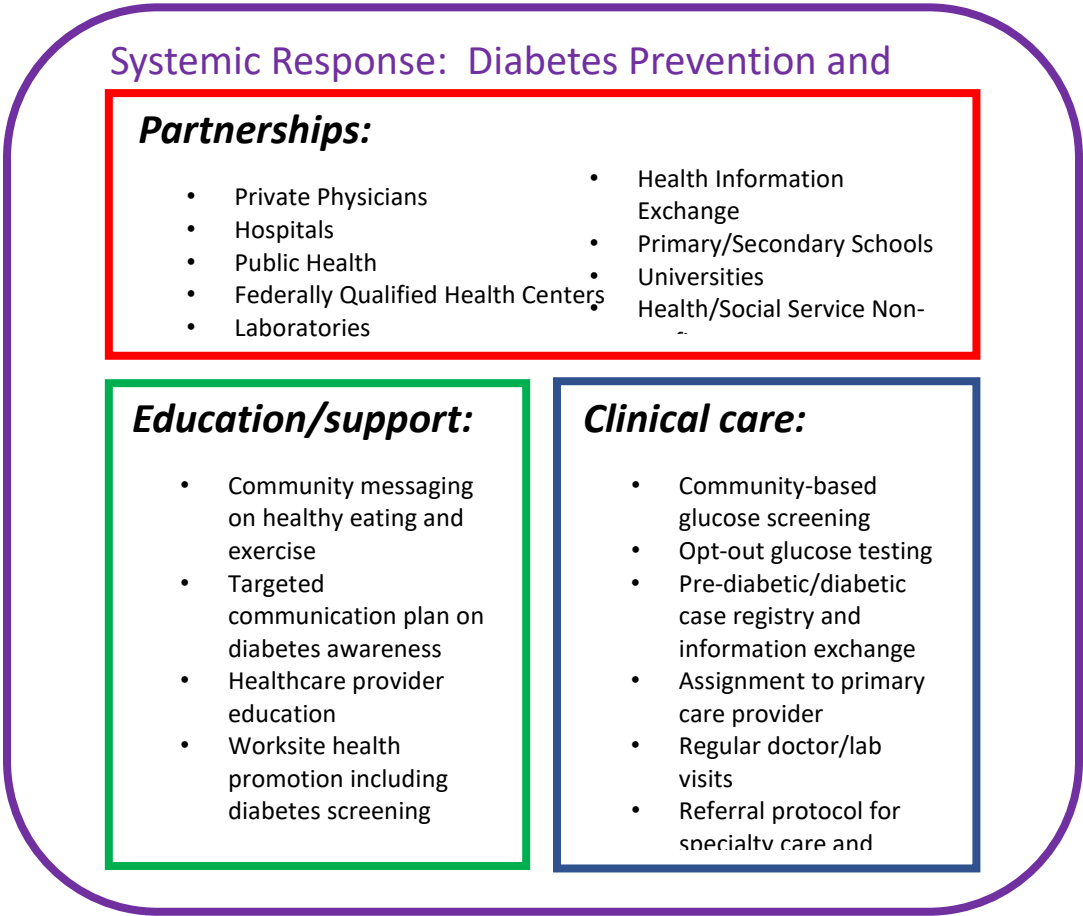
The surge in Type 2 diabetes is attributable to obesity. About 90% of those diagnosed are overweight or obese (>25 BMI). Overweight (25-30 BMI) increases risk by 2.4 times over normal weight, obesity (>30 BMI) by six times. Obesity combined with genetic predisposition inflates risk of diabetes by 14.5 times. The message is clear: lifestyle changes and weight reduction are key to controlling the diabetes epidemic.

El Paso County Overweight: 2015-2019, Adults 18+				El Paso County Obese: 2015-2019, Adults 18+		
	Percent	Number		Percent	Number	
<b>Total</b>	37.1%	<b>225,174</b>	<b>Total</b>	32.2%	<b>195,434</b>	
Age: 18-44	35.2%	114,421	Age: 18-44	26.7%	86,645	
Age: 45-64	37.9%	69,140	Age: 45-64	41.8%	76,255	
Age: 65+	41.8%	41,613	Age: 65+	32.5%	32,354	

Nearly 70% of adult El Pasoans are overweight or obese. Weight status is a community alarm bell. Along with diabetes many chronic diseases are exacerbated by excessive weight including cardiovascular and cancer. Increasing physical activity and eating less are the solutions but incorporating them into a *permanent* lifestyle change is the challenge of our time.

Weight gain and retention is exacerbated by a calorie-dense diet that often consists of multiple starches per meal supplemented by a much smaller portion of greens. A typical restaurant meal starts with all-you-can-eat chips and salsa followed by enchiladas or gorditas, rice and beans. In a small, but valiant, effort to nutritionally balance the meal some shredded lettuce is added to the platter.

Three hundred thousand (300,000) El Pasoans are diagnosed or at-risk for diabetes Yet there is no systemic response to register them, offer readily available and affordable education and other support services, and ensure that all are regularly tested and have access to clinical services to help preserve and protect functionality. The figure below illustrates the key players and activities of a systemic response.

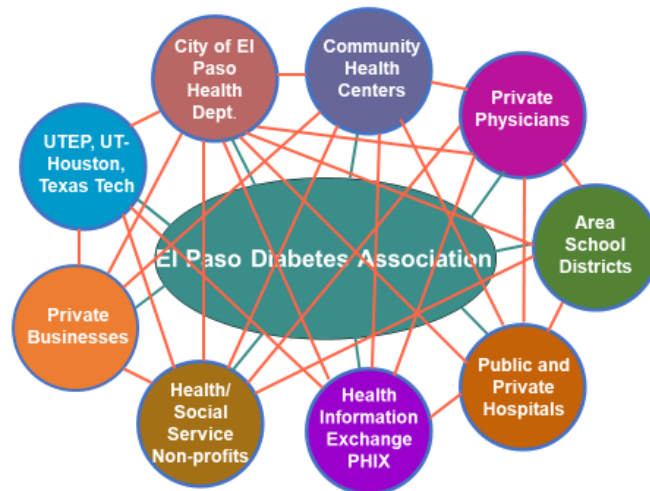


Like any major city/county with a huge diabetes burden, El Paso allocates public and private health resources to prevent and mitigate the debilitating effects of unchecked diabetes. Hospitals, community health centers, and private philanthropy invest in diabetes programs. There are certified diabetes care and education specialists (CDCES), Diabetes Self-management Education and Support programs (DSMES), Diabetes Education and Empowerment Programs (DEEP), CDC-recognized Diabetes Prevention Programs (DPP) for pre-diabetics, and county/university/community health center promotores initiatives. The problem is there just aren't enough resources relative to need:

- 1 community health foundation (PDNHF) supports primary and secondary prevention for diabetes
- 16 diabetes care and education specialists for a target population of 300,000 diabetics and pre-diabetics (1 CDCES : 18,750 diabetics/pre-diabetics)
- 5 organizations provide Diabetes Self-management and Support programs
- 1 organization offers Diabetes Education and Empowerment Program
- 2 agencies offer Diabetes Prevention Program
- 200 active promotores are available through PDNHF-supported county and university initiatives and Federally Qualified Health Centers (FQHC)

But it's not just about scaling up clinical and support resources commensurate with need. El Paso does not have a lead organization for assessing/reporting prevalence/incidence of diabetes and pre-diabetes, monitoring/reacting to community demand and capacity for diabetes prevention and management services, and developing and advancing responsive public policy.

The appropriate agency for assuming this role is the local diabetes association. However, it currently lacks leadership history and organizational capacity to take on the responsibility. PDNHF has invested in capacity building at the diabetes association but additional resources are necessary. The figure below illustrates the central role the diabetes association could play in building and maintaining a network of organizational relationships for diabetes advocacy and community response.



Diabetes, like other chronic diseases, is a non-notifiable condition in Texas. Hence, healthcare providers are NOT required to report diabetes (or pre-diabetes) to the health department. Without mandatory reporting there is no centralized database of individuals with or prone to diabetes. That database is crucial to understanding who has diabetes or is at risk, their access to care and support services, and health status.

In lieu of state-mandated reporting of diabetes, a community can establish a local, voluntary case registry which captures critical demographic, diagnostic, and disease progression data. El Paso's health information exchange (PHIX) could serve as the local case registrar. Though all area hospitals participate in the exchange, most physician practices do not. For the enrolled providers, PHIX is developing a tool for referral of patients to specialists and diabetes education services. Resources are needed to incentivize additional physicians to participate in PHIX and to help underwrite a Diabetes Data Workgroup. The workgroup will identify critical data elements and create the format for information sharing within the exchange and the reporting of diabetes prevalence to the community.

Selecting a lead organization and expanding technical capacity to monitor the health status of pre-diabetics and adults with diabetes are important building blocks in El Paso's response. However, to reduce risk for diabetes and manage health consequences, lifestyle change outside the hospital and doctor's office is required. Without available, accessible, and affordable diabetes education/support services community health improvement is unattainable.

The local diabetes association along with the medical school at Texas Tech, two of the three Federally Qualified Health Centers, and the two public hospitals (University Medical Center and Children' Hospital) offer Diabetes Self-Management Education and Support services (DSMES). However, organizational capacity is limited by the shortage of Certified Diabetes Care and Education Specialists (CDCES). Though there is no national standard set by the American Diabetes Association for the ratio of CDCES to general population or CDCES to diabetics/pre-diabetics, the current ratio of 1 CDCES to 19,000 El Pasoans with or at risk for diabetes is notably inadequate.

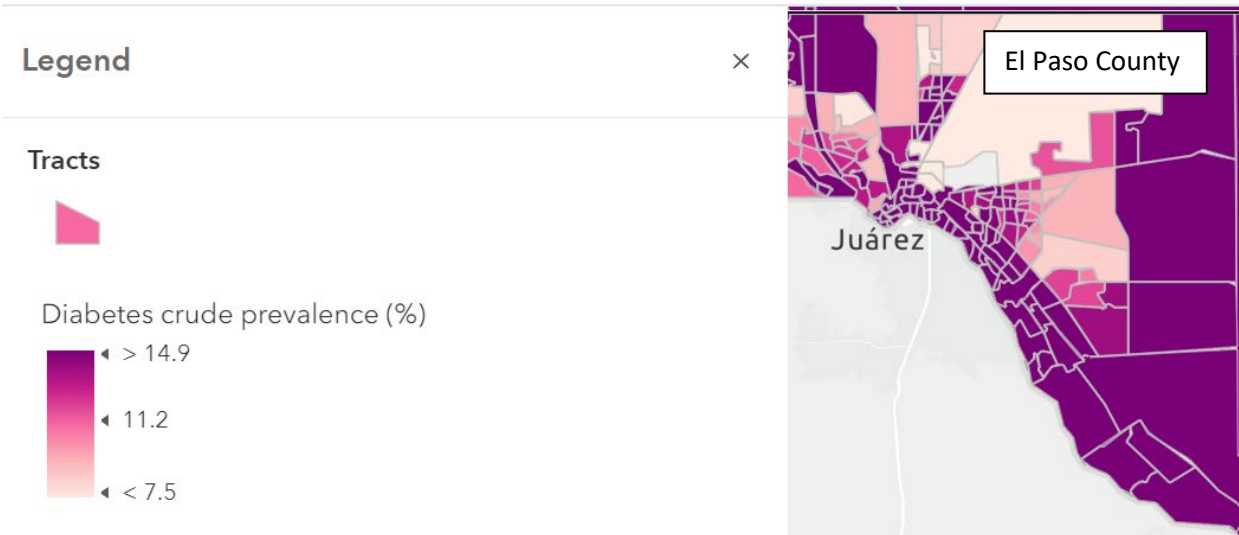
Approximately, 48% of the adult population with a diabetes diagnosis receives diabetes education services. If that population is served by a cadre of 16 CDCES, then the current ratio would be 1 CDCES to 2,500 adults with diabetes  $((83,000 \text{ estimated adults with diabetes} \times 48\%)/16)$ . At this ratio, an additional 17 CDCES would be necessary to serve just the adult population with a diabetes diagnosis. Substantially more CDCES would be necessary to expand services to pre-diabetics.

Prevention of Type 2 diabetes depends on community awareness of the diabetes problem, early identification of those at risk, testing, and lifestyle change. Schools and worksites are pivotal contributors to prevention efforts. General and targeted community messaging via mass media, social media, and school and worksite information campaigns would improve awareness and understanding of the risks of diabetes. Further, through their student and employee health programs, schools and private businesses could conduct testing, counseling, and referral for clinical, education and support services.

Though the increased rates of obesity and diabetes in the El Paso's Hispanic population contribute to a disparity in health outcomes for the ethnic group at-large, within El Paso there are geographic areas of greater or lesser prevalence. As illustrated by the maps below, the border census tracts have higher prevalence of diabetes (15.7-30.3% of adults 18+) and a greater percentage of the population with the major risk factor of obesity (39.7-49.8% of adults 18+).

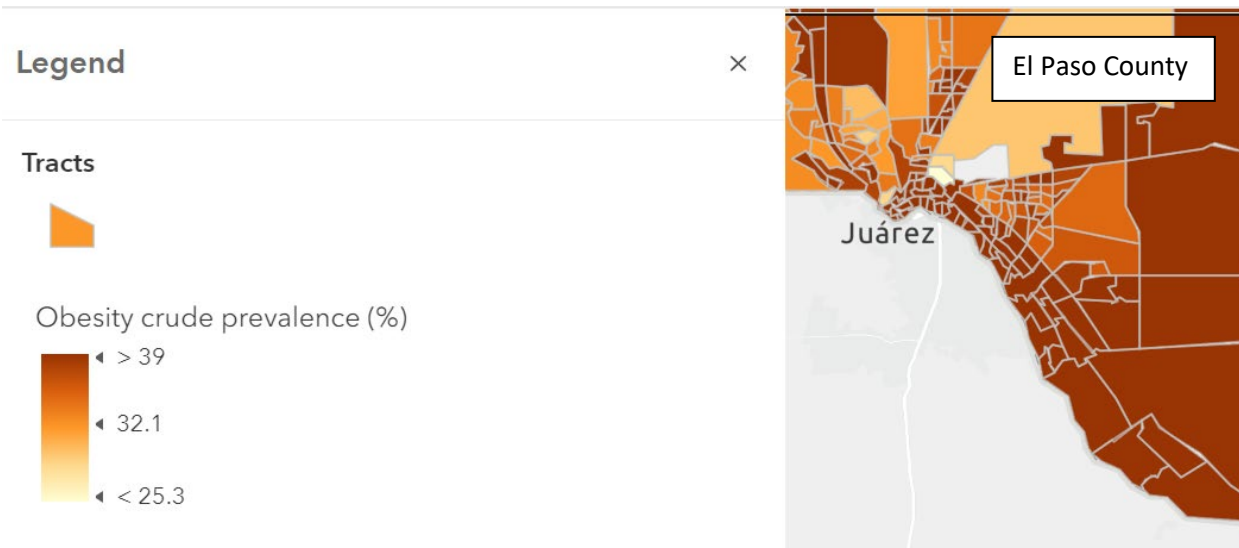
Further, these border census tracts have high socio-economic vulnerability index scores (.78-1.0 on a scale of 0.0-1.0). Consistent with lower income status, residents of these tracts are less likely to have health insurance (42.8-58.1% of 18-64 age cohort has no health insurance).

## PLACES: Diabetes



Source: CDC ARC GIS maps [Centers for Disease Control and Prevention \(arcgis.com\)](https://arcgis.com)

## PLACES: Obesity



Source: CDC ARC GIS maps [Centers for Disease Control and Prevention \(arcgis.com\)](https://arcgis.com)

Intensive outreach effort by trusted providers is necessary to influence border residents to consider and adopt healthier lifestyle practices. Promotores are the key to successful outreach. Though several health providers in the El Paso area employ promotores, expansion of their numbers and deployment sites is needed, especially along the southern border from central El Paso east to Hudspeth County.

Those at risk along the border and other diabetics and pre-diabetics in El Paso County also require regular access to clinical services to help manage disease progression. As noted, 23% of the diabetics did not have an A1C test in the previous year. Eighty (80) percent did not have a doctor check their feet. These routine services are low cost/low time investment but can yield health protection dividends to alter the



course of unchecked diabetes. Targeted provider education (physicians and staff) could help increase awareness of these and other routine preventive services that help with diabetes management.

El Paso is a big place...big land mass, big population, big diabetes. It's isolated, but not alone. What happens in El Paso portends what will occur in other regions of the country over the next few decades. Building the capacity of El Paso to effectively prevent diabetes or extend functionality will help instruct the nation on what to do and how to do it.

## **An Ask: Fulfilling the promise that we are more alike than different**

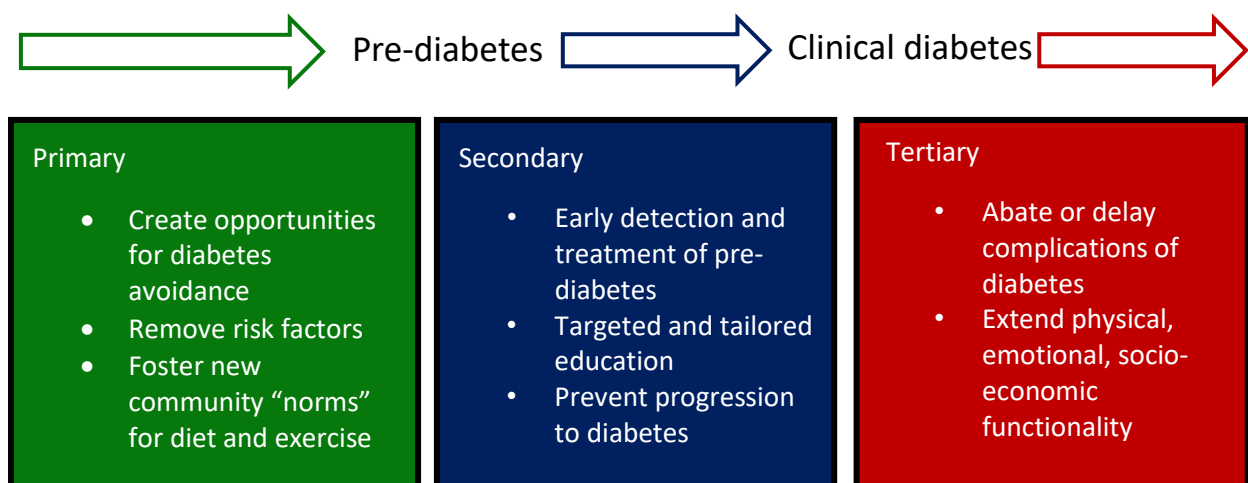
*There is immense power when a group of people with similar interests gets together to work toward the same goals.*

*Idowu Koyenikan  
Organizational Consultant and Author*

El Pasoans are no different than New Yorkers, Parisians, New Dehliites, Beijingers, Muscovites. The first languages and cultural nuances may vary but the aspirations do not. All long for safety for self and family, good health and financial security, and continued improvement of their lot for their children and the children to follow. It's that common yearning that links one person to another and ALSO connects philanthropic organizations across miles and mission.

Purpose of this PDNHF solicitation is to engage outside foundations and other philanthropic interests to transform the health status of El Pasoans who have diabetes or are at-risk for the disease. Funding partnerships with PDNHF could extend the reach of evidence-based practices and provide a learning laboratory for testing new interventions. Most important, the partnerships could improve the health and well-being of grandparents, parents, siblings, spouses, and children of those who, otherwise, would directly or indirectly experience the debilitating/devastating effects of diabetes.

Opportunities for co-investment with PDNHF can be categorized by the levels of prevention, i.e., primary, secondary, and tertiary.



### **Primary Prevention:**

- With your support, El Pasoans could learn about the threat of diabetes using mass media, personal contact (promotores), and social media messaging platforms that inform, engage and empower. Lessons learned from communication during the COVID pandemic could be applied to diabetes using the most effective “call to action” strategies.
- Help finance hands-on healthy lifestyle initiatives including school-based curriculum development, community gardens, on-line cooking classes, and expansion of the PDNHF-supported Paso del Norte Trail to its envisioned 68 miles.
- Help develop and disseminate targeted and tailored actionable education content and strategies on diabetes prevention to worksites and healthcare providers.
- Support the expansion of staff and programs at the local diabetes association to better equip the organization to fulfill its community leadership role in diabetes prevention and management, i.e., backbone organization.
- Increase the availability of CDC-recognized Diabetes Prevention Programs by underwriting the staffing and training costs associated with replication.
- Support pilot project to improve access to healthy foods in food desert areas using convenience stores as neighborhood point of delivery sites for big box food retailers.



### **Secondary Prevention:**

- Support case registry initiatives of PHIX, the local health information exchange, to capture, share, and report health data on pre-diabetes and diabetes.
- Help market/incentivize PHIX enrollment of more physicians and other key data contributors.
- Support the activities of the PHIX Diabetes Data Group to identify critical health and demographic data elements for diabetes prevention and management and develop consensus-driven referral protocol for specialty care and support services
- Support early testing, detection, and referral of students/staff and employees of private businesses for clinical and other risk markers for diabetes.
- Assist with planning/delivering community-based glucose testing.
- Help develop protocols for opt-out glucose testing for area hospitals and other select health care providers.
- Expand availability of community health workers (promotores) in high risk census tracts for obesity and diabetes by underwriting cost of training and staffing. Deploy promotores through traditional and non-traditional employment venues.
- Underwrite clinical training opportunities in private, non-profit and public health organizations and worship settings for local college students with relevant education tracts, e.g., nurses, clinical pharmacists, health educators, nutritionists, dietitians.



- Develop community/healthcare provider education and intervention strategies for early identification and enrollment in care of the estimated 150,000 adult pre-diabetics who are unaware of their status.

### **Tertiary Prevention:**

- Expand access to accredited Diabetes Self-Management Education and Support (DSMES) programs by enhancing capacity of DSMES-accredited federally qualified health centers and University Medical Center to train and precept others seeking professional credentialing/organization accreditation with the underlying goal of improving and standardizing the quality of diabetes self-management services.
- Build capacity of local diabetes association to facilitate assignment of pre-diabetics and those with diagnosed diabetes to a primary care physician/practice for medical management and, as needed, supervised weight reduction and control.
- Assist PHIX with technical capacity to monitor access to specialty care for diabetes management and to capture medical records data on insulin use, self-checks for glucose, condition of feet and other circulatory issues
- Support investigation of psycho-social issues of diabetes management, e.g., hopeful v. hopelessness, including mental health effects on family and work environment. Develop referral protocol for mental health services.



The above list of opportunities for collaborative funding is NOT exhaustive. Rather, it represents a sampling of the array of transformative community interventions that could (would) occur with financial assistance from like-purposed philanthropic organizations across the country.

## **Final thoughts from CEO Tracy Yellen:**

A mission provides organizational purpose, but a vision illustrates the world the way it should look. A mission describes and informs, a vision prescribes and inspires. But a vision is only meaningful if it is adopted and actualized by others. Otherwise, it's just one organization wishing and hoping.

A shared vision can occur when people believe that their fate is intertwined with the lot of others who are more like them than different AND have the same aspirations for themselves and their families.

And service makes the vision real. 'Service' is defined as a helpful act. It's not just pondering what to do; it's doing what needs to be done. Though studying (pondering) the risk/benefit of co-investment with PDNHF is appropriate for due diligence, El Paso (and any other community) can only be changed by actions.

In a nutshell...it's a civics orientation to problem solving. As citizens/residents, each is obligated to better the community through paid and unpaid work, through financial, intellectual, and sweat investments. It's not optional; it's the price of civil society. And that community extends beyond the geographical boundaries of a city or county of domicile (whether it's the city/county in need or the host city/county of the philanthropy).

A positive response to this Case for Support is testament to understanding that better health occurs through connection. That high connection is associated with health protection and promotion while low connection worsens health risk. That desire for connection is not limited to the residents of El Paso County. Rather,

its reach extends to others across the country who comprehend that what happens with diabetes in this border county of 836,000 will eventually affect them. That, indeed, we are connected.

This case for support is framed in the spirit of mutual, collective interest. When interests are aligned across organizations and miles, resources are multiplied and systemic change attainable.

Diabetes is a thief, but it needn't act with impunity. Much can be done to stop it from stealing function, vitality...hope. Through risk reduction, improved surveillance, and a common call to community action, the curve of diabetes can be flattened.

I am looking forward to working with you to transform lives in El Paso County.

Tracy J. Yellen  
CEO