

CPRIT CASE STUDY 2 – CERVICAL CANCER PROGRAMS IN PUBLIC HEALTH REGION (PHR) 10

WHY PHR 10? WHY CERVICAL CANCER?

Located in the western most portion of Texas, PHR 10 – covering El Paso and 5 surrounding rural counties – is like other border regions of the state. Largely rural, Hispanic, Spanish-speaking and hundreds of miles from any comprehensive cancer care center, PHR 10 is both an excellent example of the rural, border experience in Texas and a unique geographic area.

Near the median of Texas PHRs in terms of rates of cervical cancer incidence, late-stage incidence, and mortality, nearly half (6 of 13) of the cancer prevention grants awarded to PHR 10 by CPRIT over the analysis period (2012 to 2020) were focused on cervical cancer. While Texas observed a slight increase in cervical incidence, a slight increase in late-stage cervical incidence, and no change in cervical cancer mortality, PHR 10's incidence rate remained the same and its late-stage incidence and mortality rates dropped. Although causation cannot be established, positive trends in cervical cancer are occurring in PHR 10 an area where CPRIT has invested in cervical cancer prevention interventions.

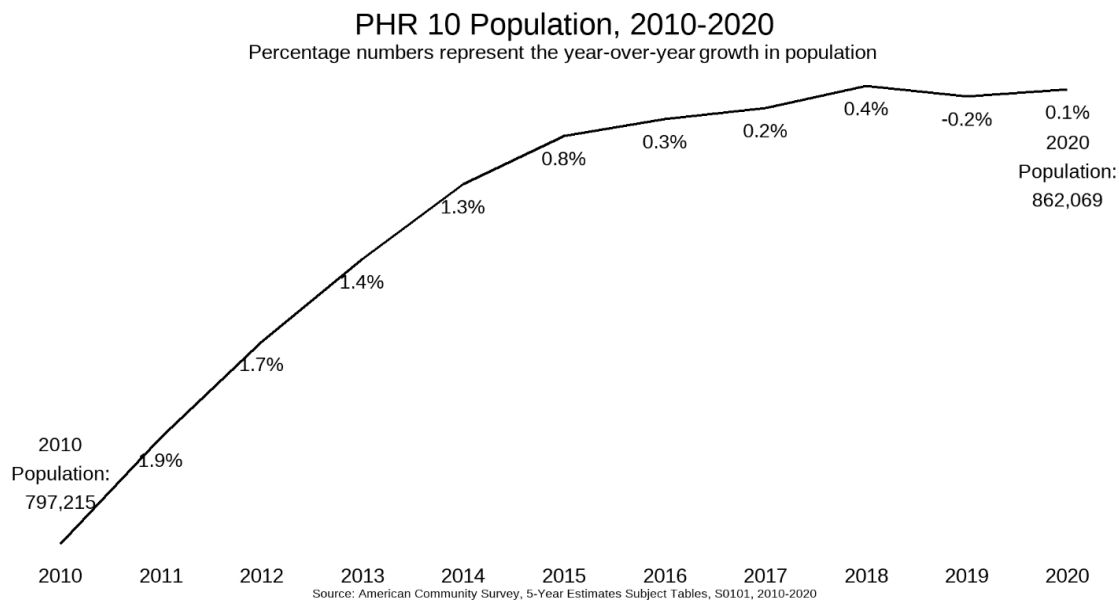
BACKGROUND AND INTRODUCTION

Population and Demographics

PHR 10 is a subsection of West Texas comprised of 6 counties: Brewster, Culberson, El Paso, Hudspeth, Jeff Davis, and Presidio. These counties are largely rural, except for the part of El Paso County containing the city of El Paso; the total population for the five counties excluding El Paso is less than 24,000.ⁱ

The population of PHR 10 has been growing each year from 2010-2020, per American Community Survey 5-year estimatesⁱⁱ and grew overall from 797,125 to 862,069. However, the year-over-year percentage growth slowed at the end of the decade. Similarly, the population aged 65+ has increased each year though the growth did not plateau at the end of the decade like the overall population. See Figure 2.1.

Figure 2.1 Population Change in PHR 10



As of 2020, the majority of the population of PHR 10 identified as Hispanic or Latino, more so than Texas overall. All other racial and ethnic categories are represented at much lower rates than the rest of the state.ⁱⁱⁱ See Table 2.1.

Table 2.1. Race and Ethnicity in PHR 10 Compared to Texas

Race/Ethnicity	Percentage of PHR 10 Population	Percentage of Texas Population
Hispanic	82.0%	39.3%
White	12.0%	39.8%
Black	2.8%	11.8%
Asian	1.2%	5.4%
Two+ Races	1.3%	3.0%
American Indian/Alaska Native	0.3%	0.3%
Native Hawaiian/Pacific Islander	0.2%	0.1%
Other	0.3%	0.4%

Four of the counties in PHR 10 (Culberson, Hudspeth, Jeff Davis, and Presidio) are considered Medically Underserved Areas (MUAs) by the Health Resources & Services Administration (HRSA), and parts of El Paso County are also considered to be MUAs.^{iv} Five of the six counties (Brewster, Culberson, Hudspeth, Jeff Davis and Presidio) and parts of El Paso county are also considered healthcare provider shortage areas as defined by HRSA.^v The percentage of people living in poverty in PHR 10 in 2020 was 20.6%, higher than the state average of 17.3%.^{vi}

Key Resources and Cancer Centers in the Area

Due to the rural nature of the area, there are fewer cancer resources and programs in the area, especially outside of El Paso, as compared to other areas of the state. The table below outlines key healthcare and community-based organizations and programs in PHR 10 and the services they provide.

Table 2.2 Cancer Resources and Programs in PHR 10

	Preventive Care	Screening & Diagnosis	Treatment	Education & Information	Assistance & Support
Cancer and Chronic Disease Consortium				X	X
Las Palmas Del Sol Healthcare*		X	X		
Pink the Basin					X
Rio Grande Cancer Foundation				X	X
Texas Oncology*		X	X		
Texas Tech University Health Sciences Center at El Paso*	X				
The Hospitals of Providence*		X	X		
University Medical Center of El Paso*	X				

*Organization or resource at only or primarily has locations in El Paso.

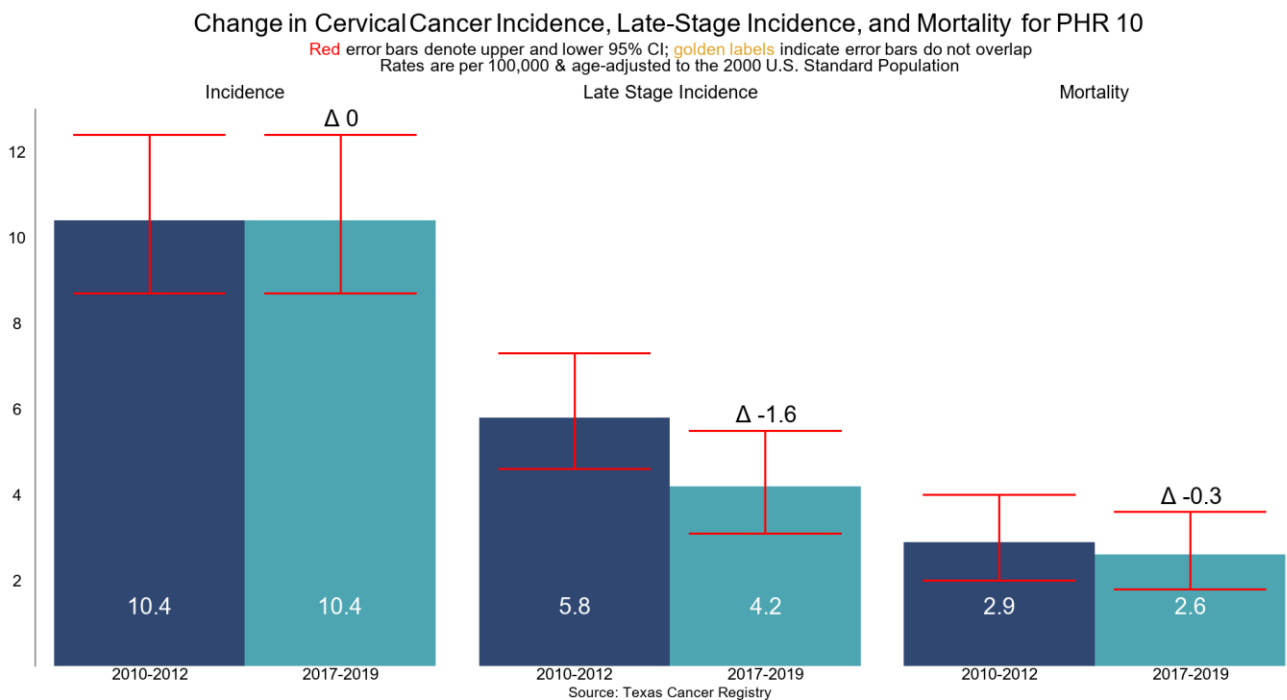
The nearest comprehensive cancer centers in Texas from PHR 10 are the Dan L Duncan Comprehensive Cancer Center and the Harold C. Simmons Comprehensive Cancer Center both located in Dallas over 600 miles from El Paso. The Mays Cancer Center at the University of Texas Health Science Center at San Antonio is a clinical cancer center which is over 550 miles from El Paso. The University of New Mexico Cancer Research and Treatment Center is the closest comprehensive cancer center overall at less than 300 miles away from El Paso.

ANALYSIS

Cervical Cancer Incidence and Mortality

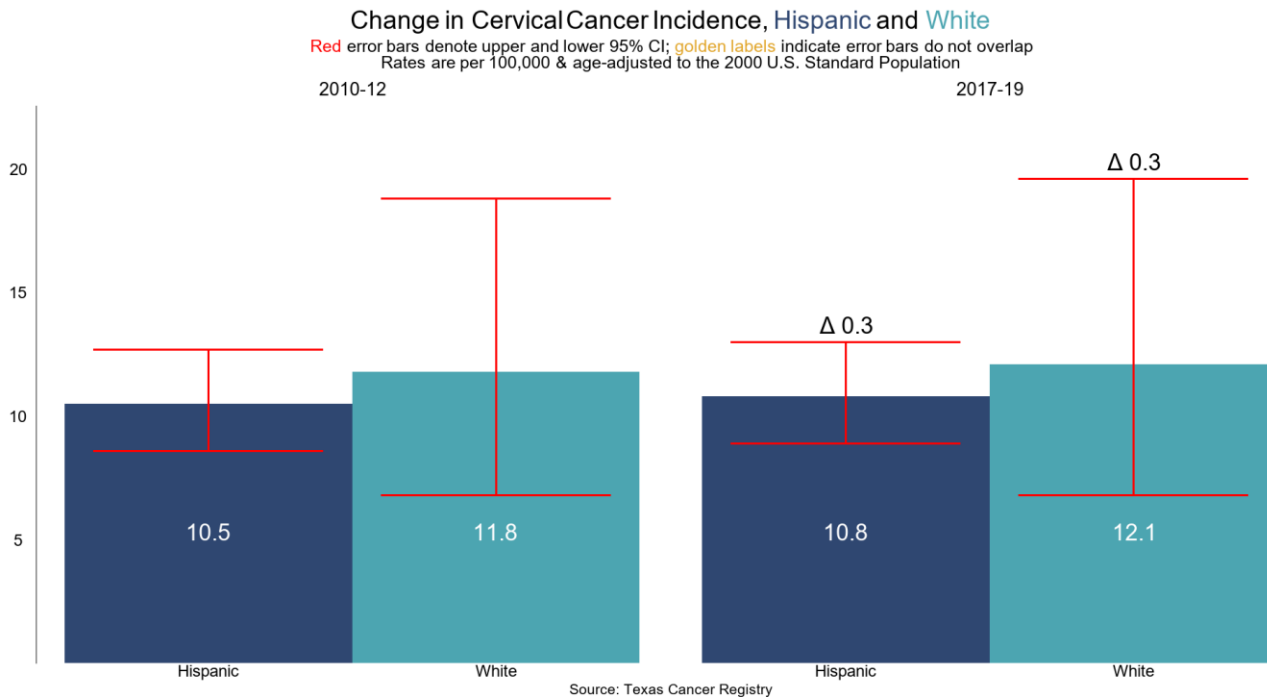
The figure below displays the age adjusted rate per 100,000 for cervical cancer incidence, late-stage incidence, and mortality comparing the years 2010-2012 to 2017-2019. The incidence rate remained the same when comparing baseline and endline, and while both late-stage incidence and mortality rates have fallen slightly during the period, statistical significance could not be determined. The rates of late-stage incidence and mortality in PHR 10 are similar to those in the state overall, 4.2 and 2.8 respectively. See Figure 2.2.

Figure 2.2 Changes in Cervical Cancer Incidence and Mortality in PHR 10



When examining cervical cancer incidence by ethnicity, individuals who identify as Hispanic have a slightly lower incidence rate than those who identify as white in both 2010-2012 as well as 2017-201, though statistical significance could not be determined. See Figure 2.3.

Figure 2.3 Change in Cervical Cancer Incidence Rate by Race/Ethnicity



Behavioral Risk Factors

Per the Behavior Risk Factor Surveillance System,^{vii} 72.5% of eligible women in PHR 10 were routinely screened for cervical cancer in 2020 which is lower than the state at 75%. Like the rest of Texas, the cervical cancer screening rate in PHR 10 has decreased somewhat from 2014 to 2020, 77.4% and 72.5% respectively.

HPV vaccination is another behavior that can affect a person’s lifetime risk of developing certain types of cancer, including cervical.^{viii} Reliable HPV vaccination data are not available at the PHR level, however, for the state of Texas, HPV vaccinations rates have been increasing in recent years and reached more than 50% for both males and females aged 13-17 as of 2020. However, this is still well below the Healthy People 2030 goal of 80%.^{ix}

CPRIT Investment in Cervical Cancer in PHR 10

From March 2012 to February 2020 CPRIT awarded 13 grants in PHR 10. Of the 13 grants awarded, 6 grants focused on cervical cancer prevention, representing an investment of \$10,173,826. Four principal investigators at three organizations were awarded, implemented, and evaluated the six projects. The primary funded organizations engaged 68 collaborators across the projects. Five of the six projects involved screening and early detection, and two of the projects included HPV vaccination.

At the time of analysis, all funded projects had submitted their final reports to CPRIT and provided information related to the people who were reached and served as well as clinical services provided. CPRIT defines people reached as the overall number of people (members of the public and professionals) that were reached through indirect contact such as noninteractive public or professional education and outreach activities, mass media efforts, brochure distribution, public service announcements, newsletters, and journals. People served is defined as direct, interactive contact such as interactive public or professional education, outreach, training, navigation service, or clinical service, such as live educational and/or training sessions, vaccine administration, screening, diagnostics, case management/navigation services, and physician consults. Through the six funded projects a total of 443,967 people were reached and 51,380 people served related to cervical cancer screening and early detection.

Clinical services delivered is a measure of the overall number of services directly delivered to members of the public by the funded projects. This includes the number of evidence-based preventive services delivered by a health care practitioner in an office, clinic, or health care system. Only one project reported on this number indicating that 3,500 clinical services were delivered.

Focus on Key Projects

The evaluation team collected quantitative and qualitative data from the Program Directors of CPRIT-funded projects that focused on cervical cancer prevention based in PHR 10 through surveys and interviews. These data provide a deeper and richer understanding of the impact of the project and the facilitators and challenges experienced during implementation. Common themes are identified below along with key quotations that support those themes.

COMMON FACILITATORS

A common theme among awardees is that the CPRIT funding and the support that CPRIT provides is invaluable to organizations' ability to impact cervical cancer screening and early detection. Program Directors noted that CPRIT as an organization was helpful to their projects by providing technical assistance and support along the way.

"So the CPRIT support staff have just been totally amazing and supportive. And you get the sense that they want you to succeed... They see your success as their success."

“First of all, the communication between my organization and CPRIT staff. There was always a very good disposition to conduct meetings, to clarify doubts, to answer questions related to administrative processes... Another thing that also made the implementation of the program much easier was that flexibility they presented to be able to allow us to make changes in the proposal, according to the design of the original plan, based on barriers that we never anticipated would be presented.”

Another benefit of having a CPRIT-funded project is the partnerships created and strengthened through the work. Program Directors referenced new collaborations with community partners and greater visibility within the community as benefits. They also felt that resource sharing improved because of the enhanced collaboration.

“Thanks to this grant, that we could be more exposed to schools and academic institutions and to all those entities that participate and receive funding from CPRIT, they were able to know us. So, as a result of that we began to receive and that also helped us a lot to sustainability. They began to contact us asking for collaboration to be part of the programs they designed.”

Finally, the ability to hire staff as well as train and develop these staff to have the skills needed to support the projects and support cancer prevention in the community.

“...staff development because that's a resource that is invaluable both for the institution and the community...that's just training and resource that we can't-- that just can't be quantified.”

“So those programs, like CPRIT funding, help us increase the staffing and the ability of programs to go get those women so they don't cross [the border], so they don't leave [the country].”

COMMON CHALLENGES

Similar to the findings of the rural screening programs case study, the Program Directors for cervical cancer projects in PHR 10 identified challenges related to access to care, lack of providers and the geographic spread.

The lack of providers and healthcare access throughout PHR 10, which is rural and large, complicates cancer prevention efforts and fewer people have access to preventive services.

This includes the lack of providers with the appropriate expertise to perform screening and diagnostic services.

“It's really the workforce development, especially in rural areas. While El Paso is considered an urban area, it's also a health provider shortage area as well.”

“A lot of our partnerships with our rural counties, it's a constant challenge. And the biggest is their capacity and turnover. Many of the health clinics in rural counties don't have bandwidth for preventive care.”

“..here there is such a short medical staff, 150 doctors for every 100,000 inhabitants - the appointments are given in three, four months.”

“Also with just the barriers of working in underserved areas, it just means that there's less availability of staffing, physicians, radiologists, places where people can get services, there's high turn-over...but it's just worse because you're setting up with a group in a rural health center to provide services there. You spend four or five months kind of getting everything set and, all of a sudden, that person has left and you're starting to process all over again or they lost their only radiologist.”

Similarly, the lack of access to health insurance creates notable challenges to cancer prevention in PHR 10.

“We have close to a 20, 22 percent uninsured rate, which is some of the highest in the state and so we have significantly impacted screening and outcomes in those two priority groups [Hispanic population and uninsured individuals]...”

Like other areas of Texas, the broad geographic spread in PHR 10 presented a common challenge for the projects. Some of the counties in PHR 10 are larger than entire states,^x meaning that service areas span hundreds of miles. CPRIT-funded projects and their collaborators must dedicate more staff time and program funding to reach people throughout their entire service area. Much of PHR 10 severely lacks public transportation access, which poses a barrier to populations who may not have another way to access screening and treatment services.

“And so just the counties that we cover, where the nearest service to get a mammogram is 75 miles around, even with being able to provide transportation, which is challenging because most of those places don't have great taxi services. You probably can't get an Uber out there. If someone has to go 75 miles, that's a day of work for people who are having challenges with work, and so it just is-- and it's everything.”

CONCLUSION

Cervical cancer disproportionately affects rural Texans, and mortality rates have not changed substantively in the past ten years. Populations living in rural areas often face challenges accessing preventive screenings and supportive resources because of health insurance status and being far away from services. CPRIT has played a critical role in supporting cervical cancer detection in PHR 10, as noted by a Program Director:

“Since we started, we're hitting over 70,000 individuals. We've had people diagnosed with hundreds of cancers at very early stages. Many of these people will probably not have been diagnosed until they had more advanced cancer, which stage they would not have been able to get the help they needed or get cured from their disease.”

The ability of these funded programs to reach populations in need and deliver important services demonstrates CPRIT's unique role and impact in the community. Learn more about CPRIT's impact on cervical cancer and explore grant opportunities to bring these vital programs to your own community. Visit cprit.texas.gov to discover how you can advocate for continued funding and explore eligibility criteria for CPRIT grants.

ⁱ U.S. Census Bureau. (2022). *Data Profiles, American Community Survey*. U.S. Census Bureau. <https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2022/>.

ⁱⁱ U.S. Census Bureau. (2024, June 18). *American Community Survey Data*. U.S. Census Bureau. <https://www.census.gov/programs-surveys/acs/data.html>.

ⁱⁱⁱ U.S. Census Bureau. (2020). HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE. *Decennial Census, DEC 118th Congressional District Summary File, Table P9*. Retrieved June 2, 2024, from <https://data.census.gov/table/DECENNIALCD1182020.P9?q=P9>.

^{iv} Health Resources and Services Administration. (2024). *MUA Find*. U.S. Department of Health and Human Services, Health Resources and Services Administration. <https://data.hrsa.gov/tools/shortage-area/mua-find>.

^v Health Resources and Services Administration. (2024). *HPSA Find*. U.S. Department of Health and Human Services, Health Resources and Services Administration. <https://data.hrsa.gov/tools/shortage-area/hpsa-find>.

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- ^{vi} U.S. Census Bureau. (2022). Poverty Status in the Past 12 Months. *American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1701*. Retrieved June 20, 2024, from [https://data.census.gov/table/ACSST5Y2022.S1701?q=poverty&g=010XX00US_040XX00US48.48\\$0500000](https://data.census.gov/table/ACSST5Y2022.S1701?q=poverty&g=010XX00US_040XX00US48.48$0500000).
- ^{vii} U.S. Centers for Disease Control and Prevention. (2024). *Behavioral Risk Factor Surveillance System*. U.S. Department of Health and Human Services, U.S. Centers for Disease Control and Prevention. <https://www.cdc.gov/brfss/index.html>.
- ^{viii} U.S. Centers for Disease Control and Prevention. (2021). *HPV Vaccine Recommendations*. U.S. Department of Health and Human Services, U.S. Centers for Disease Control and Prevention. <https://www.cdc.gov/vaccines/vpd/hpv/hcp/recommendations.html>.
- ^{ix} Office of Disease Prevention and Health Promotion. (2022). *Healthy People 2030. Increase the proportion of adolescents who get recommended doses of the HPV vaccine*. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination/increase-proportion-adolescents-who-get-recommended-doses-hpv-vaccine-iid-08>.
- ^x U.S. Census Bureau. (2024). *United States Profiles*. U.S. Census Bureau. <https://data.census.gov/profile?g=010XX00US>.