

HPV Cancer Free Texas 2023 Impact Report





INCREASING PUBLIC AWARENESS

10 million

social media impressions

43,595

HPV Cancer Free Texas website clicks



CONVENING KEY PARTNERS

170

attendees at the 3 day virtual summit

77

attendees at in-person member meeting catalyzed collaboration



PROVIDER & HEALTH SYSTEM CHANGE IN TEXAS

560k 9 to 13-year-old patients

919 providers and staff trained

160 clinic sites

+6 percentage point increase in HPV initiation



ACTIVATING CHWS & SCHOOL NURSES

1,398 CHWs trained since 2020

69% of CHWs increased HPV knowledge

29 school nurses educated in 7 districts

1 manuscript on CHW ECHO 1.0 submitted



One of every 10 persons under the age of 18 in the U.S. lives in Texas. Prior to the pandemic, Texas had more adolescents unvaccinated against HPV-cancers than any other U.S state. The pandemic increased the likelihood that HPV doses were skipped or missed, and recovery may take many years.

Mission: HPV Cancer Free Texas (HPVCFT) boasts an audacious goal: to increase the HPV vaccination series completion rate in Texas from **40% (2017) to 80% by 2026**. Funding from the Lyda Hill Philanthropies (LHP) since 2019 has enabled ACS' HPVCFT project to develop a robust multi-stakeholder strategy to promote vaccination uptake in Texas:



PROVIDER AND HEALTH SYSTEM CHANGE

The biggest contributors of change are doctors and the health systems in which they practice. ACS staff engage private and public health systems across the state in clinical quality improvement (QI) projects to implement evidence-based interventions (EBIs) to increase HPV vaccination rates.



ACTIVATING COMMUNITY HEALTH WORKERS & SCHOOL NURSES

ACS uses Project ECHO to engage, educate, and coach Community Health Workers (CHWs) and school nurses in Texas. Participants learn how to effectively communicate pro-HPV vaccination messages to parents and adolescents.



INCREASED PUBLIC AWARENESS

It is critical to raise HPV vaccination awareness and knowledge among parents. ACS has carried out a comprehensive communication campaign in North Texas for the past five years, using a variety of media channels to champion HPV vaccination.



CONVENING KEY PARTNERS

Since 2017, ACS has convened the statewide Texas HPV Coalition. The coalition is comprised of clinicians, researchers, state and local agencies, health systems, public health organizations, and professional groups that catalyze collaboration across the state.



HPVCFT PROJECT HISTORICAL TIMELINE

HPVCFT starts

12% of all U.S. adolescents ages 13-17 who had not started the HPV vaccine series reside in TX.

Project setup

YR1 media campaign

Pulse survey

System grants

2019

YR2 media campaign

CHW ECHO (4 series)

TACHC partnership & FQHC collaborative*

2020

In 2020, TX ranking on HPV series completion in the CDC NIS teen survey improved greatly, increasing from 41st to 31st out of 50.



YR3 media campaign

CHW ECHO (6 series)

System grants

2021

TX national HPV ranking dropped back down to 48th.

YR4 media campaign

Pulse survey

CHW ECHO (4 series)

CHW ECHO 2.0 Pilot

System grants

2022

In 2022, efforts across the state helped improve TX ranking to 41st out of 50 states and D.C.

YR5 media campaign

CHW ECHO (6 series)

CHW ECHO 2.0

School nurse pilot

System grants

2023

Well child and vaccine visits have yet to return to pre-pandemic level, highlighting the continued need for focused HPV vaccination intervention.

* The Texas Association of Community Health Centers (TACHC) is a peer network including Federally Qualified Health Centers (FQHCs)



Looking Back: 2022 Texas Health Centers & Systems Engaging Texas Health Systems in Quality Improvement

A total of 14 Texas health centers and systems participated in the 2022 12-month national quality improvement cohort.* Of those, three were integrated delivery systems (IDS) and 11 were Federally Qualified Health Centers (FQHCs). Six North Texas 2022 health systems were funded by LHP.

Quality improvement (QI) efforts were implemented at 160 clinic sites with a total active 9 to 13-year-old patient population of over 560,000. This patient population was far greater than 2021, mostly because of the large hospital systems engaged in 2022. The health systems reported urban (57%), rural (29%), suburban (29%), and school-based clinic sites (36%) with the majority providing pediatric (93%) services and many providing family medicine (71%) services.



14 health systems with 160 implementing clinic sites



29% included rural sites



560,000 active 9 to 13 year-olds



57% included urban sites

Project Successes & Lessons

“One success [was] streamlining processes in the dental department, to facilitate referrals for vaccinations. We are [also] now able to collect data on refusals and acceptance rates.”

“Building data reports is not a simple ask. It takes countless emails and several meetings between multiple individuals to ensure that data pulled from the EHR is accurate and reliable. I feel like the biggest “win” was the ability to automate a HPV vaccine report each month.”

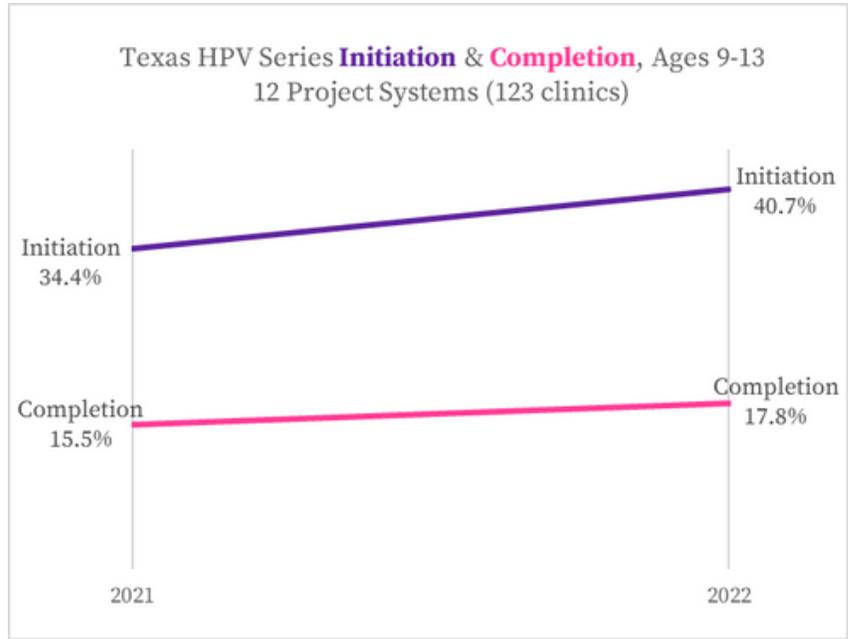
* Final outcomes of the 2022 QI projects were not finalized until mid-2023 and have not been previously reported.



Impact on Vaccination

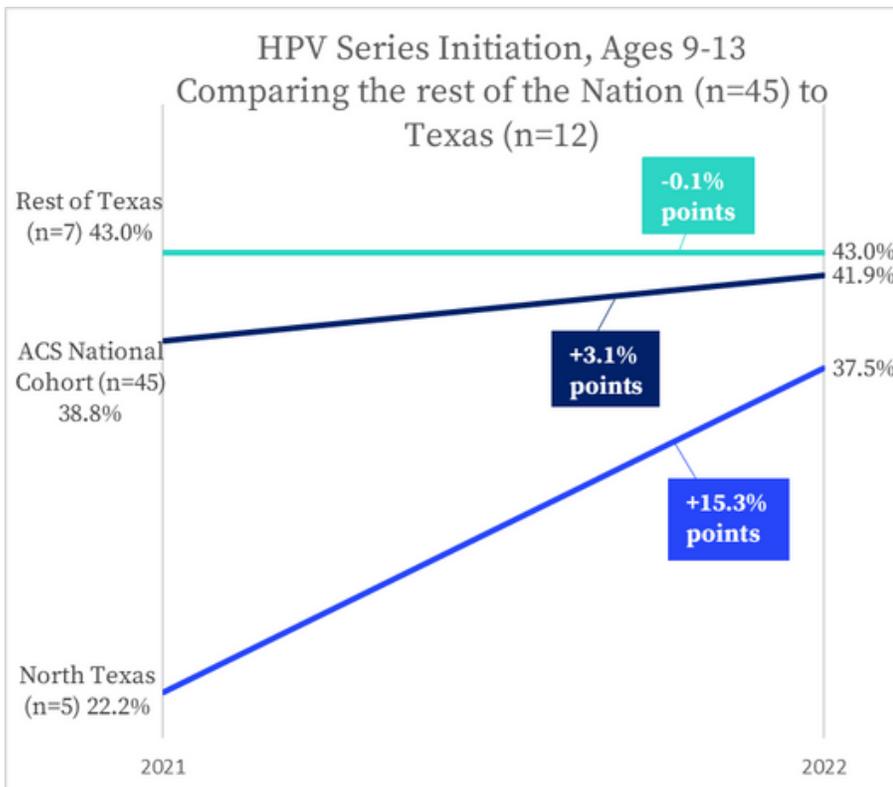
HPV vaccination series initiation increased from an average of 34.4% in 2021 to 40.7% in 2022, a **change of 6.3 percentage points**.

Texas health systems also saw a **2.3 percentage point increase for series completion**, from 15.5% in 2021 to 17.8% in 2022.



*Two health system's data were excluded due to quality issues.

Lyda Hill-funded Texas systems had lower average vaccination rates at the start of the project but had **the highest vaccination rate change** (15.3 percentage point increase). This highlights the need for continued focus on Texas.



To accomplish this impact, Texas health centers:



implemented 84 EBIs



trained 277 providers



trained 642 staff



2023 Texas Health Centers & Systems



5 health systems with 13 implementing clinic sites



20% include rural sites



5,283 active 9 to 13-year-olds

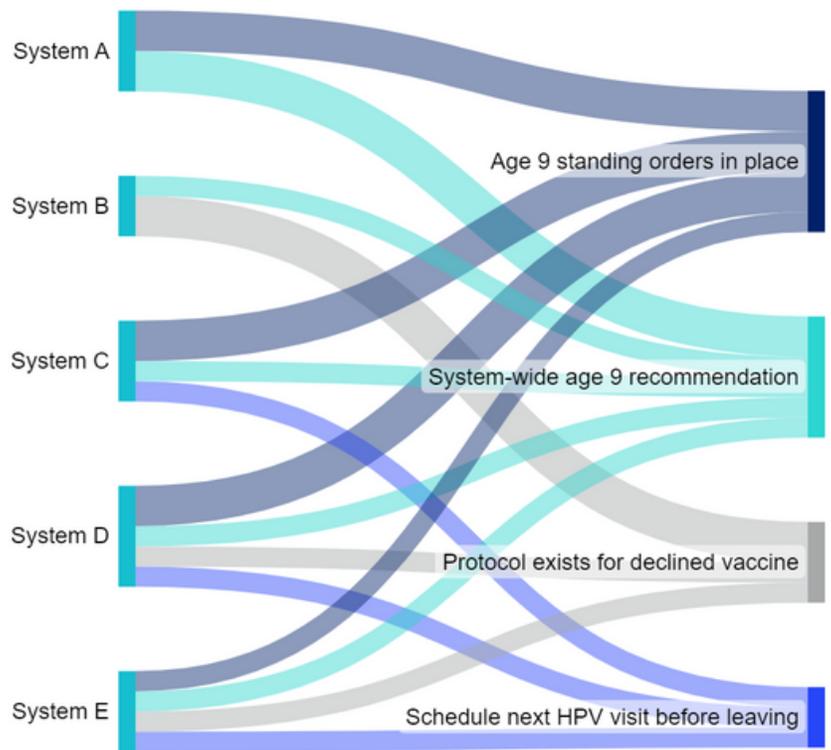


40% include urban sites

In 2023, QI efforts were implemented at 13 clinic sites across five North Texas health systems with a total active 9 to 13-year-old patient population of 5,283. Engaged systems were smaller in size but targeted uninsured/underinsured populations and may be more likely to reach rural populations. Systems reported suburban (60%), urban (40%), rural (20%), and school-based (20%) clinic sites with all providing pediatric (100%) services and many providing family medicine (60%) services. It is important to note there is robust interest in HPV vaccination QI projects across the state of Texas outside of the 26 counties of original focus.

System-level sustainability when starting the HPV series at age 9

Implementing vaccination starting at 9 has been a big focus for 2023, as emerging evidence suggests that starting the HPV series at 9, is more likely to result in on time series completion. The figure on the right displays which age 9-focused clinic-wide policies were implemented by which 2023 participating systems. Each protocol is a different color. Thicker nodes indicate the policy was implemented in 2022 and 2023, whereas thinner lines indicate implementation for only 1 year. All systems implemented at least two age 9 protocols. These clinic-wide policies contribute to the sustainability of age 9 efforts after these projects end.





ECHOs to Educate Community Health Workers and School Nurses

HPV Cancer Free Texas has used the Project Extension for Community Healthcare Outcomes (Project ECHO) model as a method of knowledge dissemination to various populations since March of 2020. ECHO has proven to be an effective way to gather medical professionals and discuss vaccination barriers and methods for increasing uptake in HPV vaccines. This is done through didactic teaching and case-based learning. HPV Cancer Free Texas hosted several ECHO cohorts for medical providers, Community Health Workers (CHWs), and school nurses. In 2023, three ECHO cohorts were executed. These ECHOs included the CHW-focused ECHO 1.0 and 2.0 and the School Nurse Project ECHO.

Educating 30% of Texas CHWs with CHW ECHO 1.0 from 2020–2023

1,398

CHWs participated in at least one ECHO session; 476 attended 4+

7,038

Continuing Education credits claimed (CEUs)

20

Cohorts with average attendance of 31 participants

-  Module 1 Role of CHWs in Immunization
-  Module 2 CHW HPV 101
-  Module 3 Cultural Humility & Social Determinants
-  Module 4 Communicating with Parents
-  Module 5 HPV Myths
-  Module 6 Debunking the Myths
-  Module 7 Tools & Resources
-  Module 8 Training Trivia

The CHW ECHO 1.0 uses the [Project ECHO Model](#) to educate CHWs in Texas on the basics of the HPV vaccine and their role in vaccine uptake. Participants engage in role playing and present experiences talking about the HPV vaccine in the community to learn from each other.

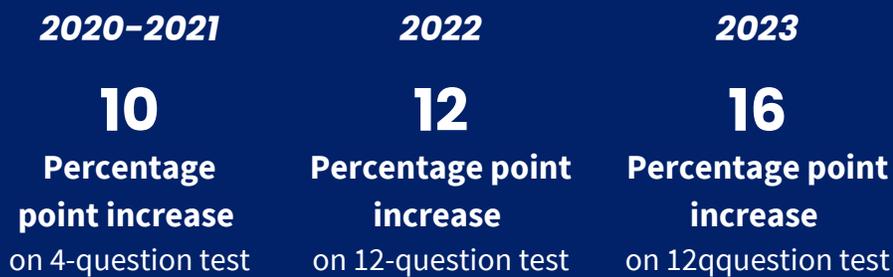


Who are the CHWs reached in the ECHO 1.0?



What impact has the ECHO 1.0 had on CHW participants?

Knowledge Change Pre and Post Training

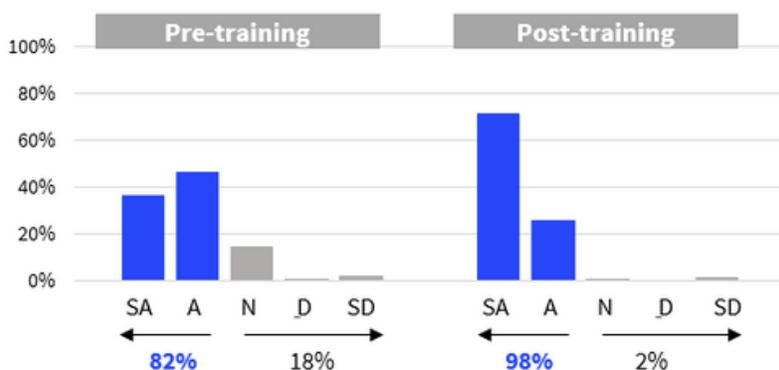


Number of matched survey responses: 2020-21 = 146, 2022 = 87, 2023 = 68

"I educated my client about [the] HPV vaccine. She didn't know anything about HPV and the vaccine that can prevent cancer for her children."

CHW ECHO participants from 2020-2023 showed a shift in HPV vaccination beliefs and confidence towards **strongly agree** on the post-training survey (n=301)

The HPV vaccine is safe.



I am confident discussing HPV vaccination in my community.



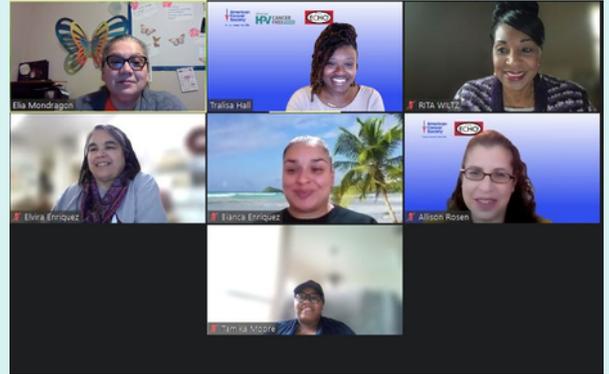
[^] Response scale: Strongly agree (SA), Agree (A), Neither agree nor disagree (N), Disagree (D), Strongly Disagree (SD)



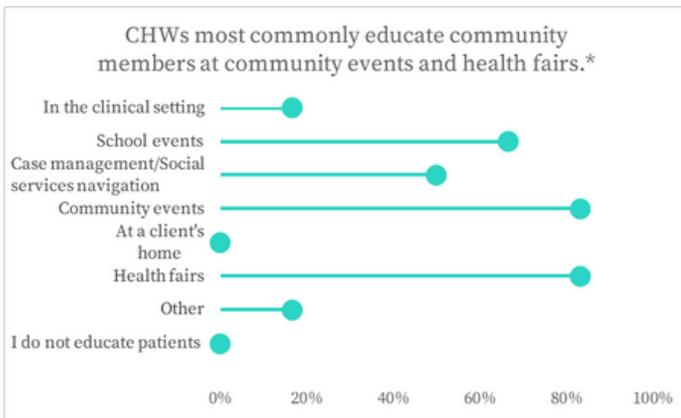
Moving from knowledge to action: ECHO 2.0

Community Health Workers are impactful because of their influence within their communities. While ECHO 1.0 educates CHWs about the HPV virus and vaccine, the **ECHO 2.0 equips CHWs to take that gained knowledge into their respective communities.**

Developed with a focus on activation, the HPV ECHO 2.0 is a continuation of the HPV Vaccination Project ECHO that **walks CHWs through the process of planning a community event**, including tasks such as understanding their reach, selecting a community, researching and contacting stakeholders and executing an HPV vaccination presentation.



2023 ECHO 2.0 implementation and outcomes



One 4-session series was offered at the end of 2023. This was the second iteration of the CHW 2.0 ECHO. Nine CHWs and Community Health Worker Instructors (CHWI) attended the ECHO 2.0 and earned continuing education hours. Participants held conversations with stakeholders of various community groups and scheduled speaking opportunities within their own organizations, at local churches and during community events.

“[I took this course] because I want my community to be free of HPV.”

Lessons Learned :



Interest has been lower than ECHO 1.0



Purposeful recruitment of CHWs in roles where they can navigate community members to vaccination



2023 School Nurse ECHO Pilot

Mission: HPV Vaccination Project ECHO for School Nurses provides an in-depth knowledge base about the HPV vaccine, explores state and district policy and protocol around HPV vaccination information dissemination, and assists school nurses with methods to educate students and parents at their schools. We do this through a 4-session series that covers the following topics:



Session 1: HPV 101 and HPV Champions



Session 2: Assessing Opportunities



Session 3: Activation and Implementation



Session 4: Tools and Resources

Over 40 school nurses representing approximately 14 school districts from across Texas registered for the pilot series. Twenty-nine individual school nurses attended at least one session of the course. Participants are eligible to receive 1 hour of continuing education for each session attended. Partnering organizations included UTHealth Houston School of Public Health, Cizik School of Nursing at UTHealth, and Texas School Nurse Organization. Representatives from these organizations assisted with provision of CNEs, served as subject matter experts (SMEs), and led didactics for each session.



88%

Work full time



72%

Traditional nursing office



63%

Serve elementary students



74%

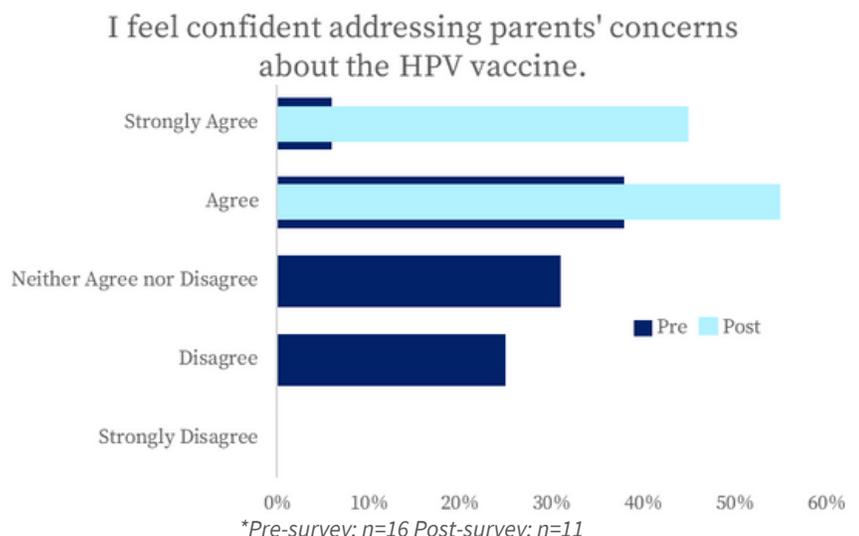
Provide parent health education



16 percentage point increase

in knowledge score from pre-ECHO to post-ECHO*

“ [After this course] I check more on the vaccinations to make sure they [students] have started HPV vaccination. If not, I try to bundle it with the vaccinations [the] student is still missing. ”





For five years, ACS has conducted a targeted media push aimed to increase overall awareness and intent to vaccinate preteens across 26 counties in North Texas. The 2023 campaign continued to leverage social media and online search to drive parents to the [HPV Cancer Free Texas webpage](#).

In 2023, the campaign garnered **43,595 website views** and drove more than **10 million impressions**.

2023 Outreach

- Goals**
 - Increase knowledge of the HPV vaccine
 - Increase HPV vaccination intent
 - Maintain awareness of the HPV vaccine
 - Position ACS as a leader in HPV cancer prevention
 - Increase overall ACS brand awareness among key investors and stakeholders
- Audience** Parents of 9 to 12-year-olds (aged 35-55) who reside in 26 North Texas counties
- Time Period** June - August 2023
- Messaging** Messages in English and Spanish aimed to drive visits to the website to receive information on the vaccine and increase their intent to vaccinate. In 2023, the most popular English message on both Facebook and Instagram was “*Help prevent more than 45,000 cases of cancer every year. Protect your child from 6 cancers.*”
- Tactics** The 2023 campaign again used a targeted media buying approach selected to reach our audience in a cost-effective manner. ACS used social media marketing on Meta and website search engine marketing (SEM). New creative assets were developed.

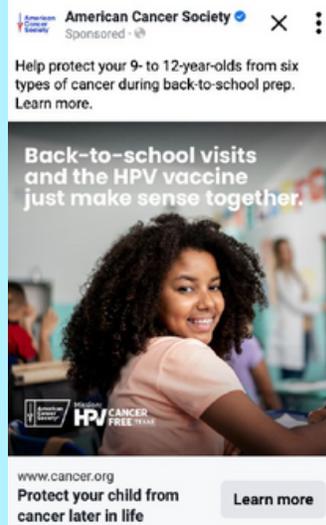


Paid Advertising on Meta

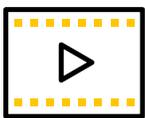
The 2023 paid media campaign was managed by Tombras advertising agency. The best performing assets (based on the number of clicks to the website) are shown below. Overall, cost per results were very low for the entire campaign. The overall campaign cost per landing page view was \$1.58 and was largely driven by the performance of the English assets.

Campaign Material Refresh

We developed and launched new campaign assets in 2023 in both English and Spanish. Six different messages and imagery were used in both languages. To the right are the creative assets.



Recommendations for 2024:



Consider adding video assets



Target assets based on market segmentation



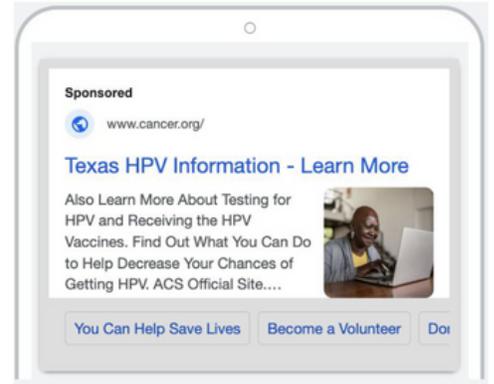
Link to awareness months



Search Engine Marketing

Google Search paid advertising efforts attracted **2,380 clicks to the website** and approximately **46,368 impressions**. SEM advertising was done during the summer months to capture parents searching for vaccine information during peak vaccination season.

The phrase match keyword “HPV” drove 46% of the impressions. Dallas County drove 39% of the impressions.



Notable audiences: Most activity was driven by young adults below the age of 44, with women driving the most clicks.



High school graduates
52% of the impressions



Family focused (parents)
23% of the impressions



“Women’s media” fans
18% of the impressions

Recommendations for 2024:



Expand the targeted audience to all of Texas for more clicks at a more efficient rate



Target the above audiences with the highest search demand to improve cost per result

Earned Media Results

Earned media focused on news radio stations to reach our target audience of individuals aged 35-55 as they commuted to and from work. Impressions from radio interviews with our local HPV staff expert totaled nearly half a million. The interviews not only brought awareness about the virus, but also encouraged parents to get their children vaccinated especially during the back-to-school push.

Listen to Tralisa Hall [here](#) and [here](#) as she tells parents why the HPV vaccine is important as they prepare for back to school!



Texas HPV Coalition

The Texas HPV Coalition has over 100 members, comprised of clinicians, researchers, state and local agencies, health systems, public health organizations, and professional groups who come together to catalyze collaboration on HPV vaccination across the state. The coalition held virtual workgroup meetings and executed two biannual meetings.

2023 workgroups:

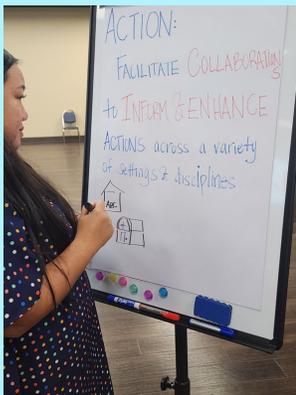


Advocacy, Awareness & Provider Education



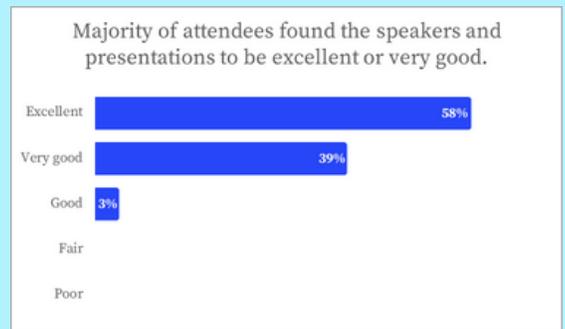
Data, Technology & Systems Improvement

2023 Texas HPV Coalition In-Person Meeting



The Coalition’s first in-person meeting since 2019 was held September 7th-8th in San Antonio, Texas and had **77 participants**. Day one focused on HPV vaccination updates on national, state, and local levels, with presentations by representatives from the CDC, Texas Department of State Health Services, ACS, The Immunization Partnership, Cancer Prevention in Texas, Centro Med Clinic of San Antonio, and Cook Children’s. Coalition members also participated in a strategic thinking activity geared toward revising the coalition mission statement.

Day two began with discussions led by Cancer Prevention in Texas (CPRIT) representative Carlton Allen on the 2024 state cancer plan and industry representative Dr. Savannah Stumph. The second half of the day consisted of workgroup breakouts.

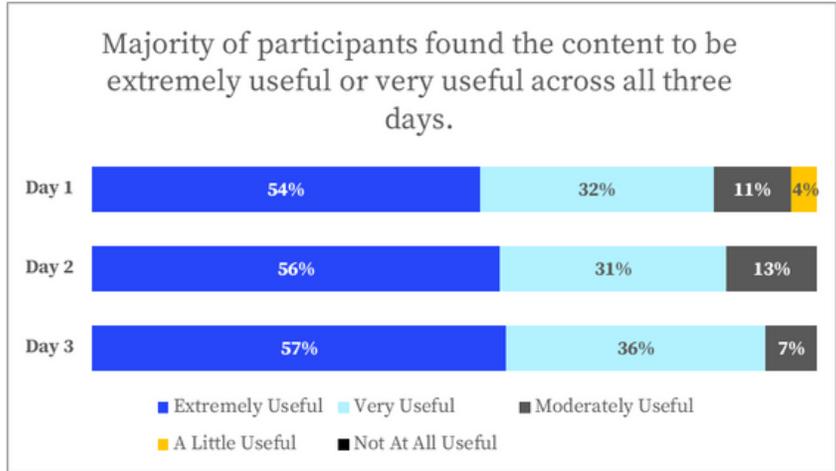


“Statistics are always shocking to me and proves the need for further education on [HPV] vaccination while still seeing the progress that has been made over the past few years.”



2023 Texas HPV Coalition Virtual Summit

The Texas HPV Coalition held a three-day virtual summit from Tuesday, Dec. 5th to Thursday, Dec. 7th. Each day consisted of a 1.5-hour session with a brief coalition overview and discussion topics led by HPV experts and leaders from across the state and country. **The 2023 Summit had over 170 virtual attendees across all sessions.**



Benefits of Inclusivity: Impact of HPV Messaging from Pharmacy and Dental Providers

Dr. Briana Hillier, DMD, Chiricahua Community Health Centers, Inc

Dr. Parth Shah, PharmD, PhD, Fred Hutch; UW School of Public Health



Community Impact—Benefits of Community Health Workers in HPV Messaging

Dr. Eva Moya, PhD, and Dr. Jacob Martinez, PhD, RN, University of Texas at El Paso

Dr. Lara Savas, PhD, UTHealth School of Public Health



Provider Education in Action

Chelsea Bufalini, MPH, CHES, Penn State College of Medicine

Dr. Tayyab Pasha, DO and Ashley Alvarez, CHW, Vibrance Texas Health Center





HPV Cancer Free Texas matters more than ever. While HPV vaccination in Texas has declined in the COVID-19 era, the HPVCFT work supported by Lyda Hill Philanthropies has seen impressive progress in 2023. We have big goals to further amplify these efforts and impact in 2024.



PROVIDER & HEALTH SYSTEM CHANGE

Partner health systems funded by LHP in 2022 increased initiation rates by 15 percentage points and had **amazing impact when compared to health systems elsewhere in Texas and nationally**, suggesting the need for funded projects in other areas of Texas.



ACTIVATING CHWS & SCHOOL NURSES

Seven ECHO cohorts were successfully executed. This effort to educate CHWs and a new curriculum for school nurses continued to **build HPV champions in Texas** communities that can increase public awareness, build trust, and drive demand across the vast rural landscape.



INCREASING PUBLIC AWARENESS

To drive Texas residents to HPV resources on our website, **new media assets were developed** and rolled out on Meta and search engine optimization targeted key audiences to expand awareness and knowledge of the HPV vaccine, resulting in over **43,000 website views**.



CONVENING KEY STAKEHOLDERS

In 2023, the coalition held virtual workgroup meetings and executed two biannual meetings. One was **the first in-person meeting** of the coalition since prior to 2019. These efforts **convened 100+ HPV experts** around HPV vaccination in the state.



In 2024, HPVCFCT will wrap up the sixth year of programming. Our goal for this year will be to continue impactful activities, innovate to meet current vaccination challenges, and ensure our programming benefits from cross-collaboration with other ACS HPV vaccination efforts.



PROVIDER & HEALTH SYSTEM CHANGE

ACS quality improvement work will evolve from funding a small number of health systems to broader Texas programming. To close gender and geographic disparities, ACS will offer QI and best practice sharing through webinars & learning communities, especially in rural areas. ACS will also explore strategies to support Vaccine for Children providers in catching up on missed doses through presentations and partnerships.



ACTIVATING CHWS & SCHOOL NURSES

ACS will grow the school nurses partnership to reach more school districts and work to identify and invite CHWs who are linked to systems of care to join ECHOs. ACS anticipates publication of a manuscript on the CHW ECHO 1.0 results from 2020-2021.



INCREASING PUBLIC AWARENESS

ACS will develop a comprehensive social media toolkit with year round plug and play awareness messaging in English and Spanish for key stakeholders. Media investment will be broadened to reach a statewide audience. ACS will also explore creating a social media group on LinkedIn to support cross-cutting efforts.



CONVENING KEY STAKEHOLDERS

ACS will continue to lead the Texas HPV Coalition and hold both virtual and in-person meetings. ACS will also connect TX coalition leaders to leaders from CA, FL and NY as the “big four” states which have the greatest potential to increase adolescent immunization.



Funder Acknowledgement

The HPV Cancer Free Texas project was made possible through generous funding from Lyda Hill Philanthropies to develop and implement a multi-pronged approach to increase HPV vaccination uptake in the state of Texas.

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