

HPV Cancer Free Texas 2022 Impact Report *to Lyda Hill Philanthropies*



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Year 4: 2022 Highlights



Public Awareness Campaign

18 million

social media impressions

23,000

HPV Cancer Free Texas website
clicks



Communities and Coalitions

Over the 4-day 2022
Summit event, we
had a total of

533

attendees at the
virtual sessions



Provider and System Change

10 health systems

130 clinic sites

3.7 percentage point
increase in HPV
initiation

4.4 percentage point
increase in HPV
series completion

436 providers and
staff trained

160K 9 to 13-year-old
active patients

67% of CHWs increased
HPV knowledge

1,017 CHWs trained
since 2020

WHY HPV VACCINATION IN TEXAS?

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**.

Texas has more adolescents and lower HPV vaccination rates when compared to the rest of the country.

This makes it an ideal place to address HPV vaccination to protect adolescents from cancer.



HPVCFT starts

2019

Texas ranks 41st out of 50 states and D.C. for HPV vaccination among adolescents.

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

2020

In 2020, Texas' ranking improves greatly, increasing from 41st to 31st out of 50.

For the first time, more than half of 13-17 year-olds have completed the HPV series.

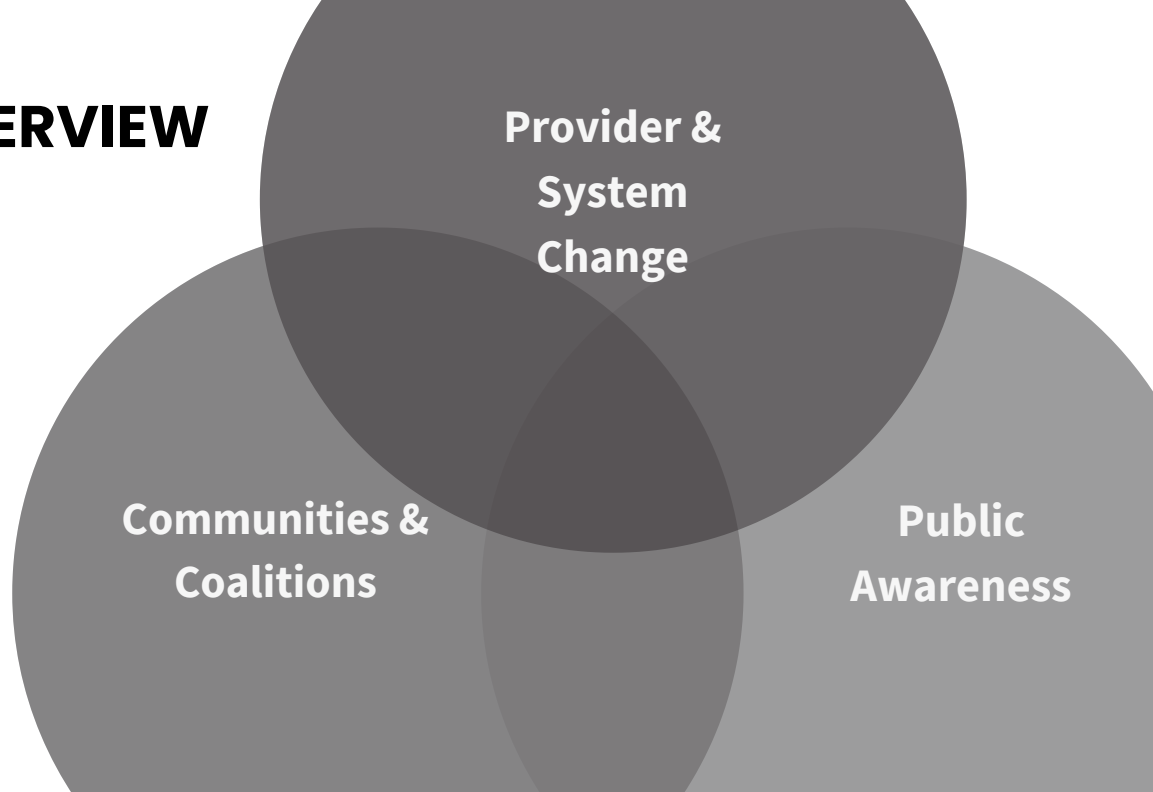
2021

As a result of the pandemic, Texas' national HPV ranking drops back down to 48th.

Despite this statewide-setback, health systems in this project demonstrate remarkable results in 2021 and 2022.

PROJECT OVERVIEW

To increase HPV vaccination uptake in Texas, HPVCFT uses three core strategies:



PROVIDER AND SYSTEM CHANGE

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



INCREASED PUBLIC AWARENESS

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



CONVENING KEY PARTNERS

For widespread success, we need strong partnerships and stakeholder buy-in. Since 2017, ACS has convened the Texas HPV Coalition. The coalition is comprised of clinicians, researchers, state and local agencies, health systems, public health organizers, and professional groups which catalyze collaboration on HPV vaccination across the state.

YEAR 4-2022 MILESTONES



PROVIDER AND SYSTEM CHANGE

Health Systems & Clinical Providers

- Secured 6 new health system (FQHCs & IDS) collaborative agreements and one extension for 2022 QI cohort focused on HPV vaccination improvement
- Leveraged the success of the North Texas program to model similar work at 2 health systems not funded by Lyda Hill

Preparing to Expand Efforts to Include School Nurses

- Established relationship with UT Public Health's *HPV All for Them* school nurse education program to message HPV vaccination and practice change with school nurses in North Texas independent school districts
- Promoted and used All For Them on-demand HPV vaccination training for School Nurses (CEU) as a prerequisite to attending School Nurse Learning Collaborative that will take place Spring 2023

Community Health Worker Education

- Conducted 5 CHW Project ECHO clinics (English and Spanish) resulting in 272 CHWs receiving structured HPV vaccination training and appropriate accreditation, 1564.5 CEUs awarded
- Launched 2 CHW Project ECHOs using the train-the-trainer model in both English and Spanish
- Completed development of CHW Project ECHO 2.0 curriculum and secured accreditation in partnership with Texas A&M's National Community Health Worker Training Center
- Launched pilot clinic of ECHO 2.0 in October 2022
- Initiated development of a CHW landing page on the Texas HPV Coalition website with resources to promote continuing education for CHWs, community activation, alumni updates, and general communication tools to mobilize parents and communities to vaccinate
- Coordinated training session with CHW alumni and ACS ECHO program

Other

- Initiated discovery on HPV intervention initiatives targeting pharmacies and pharmacists given their authority to administer vaccines

YEAR 4-2022 MILESTONES



INCREASED PUBLIC AWARENESS

- Launched an integrated marketing and communications strategy targeting the 26-counties in North Texas locations in both English and Spanish
- Expanded campaign beyond North Texas for the first time, including the major Texas cities of San Antonio, Austin, and Houston
- Launched a successful campaign in winter 2022 timed with Cervical Cancer Awareness month
- Executed follow-up pulse survey with Summit Research (400+ mothers and fathers surveyed on HPV vaccination and impact of Covid-19)



CONVENING KEY PARTNERS

- Hosted the Texas Association of Community Health Centers plenary session on HPV Cancer Free Texas and HPV vaccination opportunities within federally qualified health centers in April 2022 at annual Health Information Technology and Clinical Conference
- Held Texas HPV Coalition quarterly leadership calls, biannual member meetings.
- Developed, promoted, and facilitated Texas's HPV Coalition Virtual Summit, December 6-9th 2022
- Provided Nurse CEU opportunities and National HPV Roundtable resources for health systems, providers, nurses, dentists through Annual HPV Summit



MEASURING IMPACT

- Completed Year 4 evaluation report and revised evaluation plan to support Year 5
- Analyzed 2022 mid-point health system intervention data and set 2023 data collection timeline and data collection instruments
- Conducted virtual focus groups with CHW alumni to further develop qualitative analysis of program
- Conducted virtual interviews with three IDS systems that participated in two year projects from 2020-2021 to assess impact and feedback
- Completed analysis of CHW alumni focus group discussions and IDS interviews.
- Evaluated impact of marketing and communication campaign and tailored 2022 campaign based on data and results
- Evaluated public utilization of the Texas HPV Coalition website and enhanced website functionality based on utilization and requests for content

PROVIDER & SYSTEM CHANGE



Why Focus on Providers and Health Systems?

ACS is committed to partnering with health systems which provide a trusted medical home to adolescent patients. Health systems are integrated into local communities and have delivery systems in place to provide HPV vaccination. These systems employ the most powerful advocates of vaccination- health care providers. A provider's recommendation is the most important factor in whether a child receives a vaccine. ACS offers educational sessions and resources to partners which empowers providers for impactful vaccination conversations. In addition, ACS strategically advises the care team about effective evidence-based interventions (EBIs) to enhance the health system's HPV vaccination current processes.

How Does ACS Intervene with Providers and Health Systems?

Quality Improvement (QI) Projects with Health Systems

ABOUT: QI projects increase HPV vaccination rates using EBIs. Interventions include provider-level education aimed at improving the quality of provider recommendations and system-level changes aimed at reducing missed opportunities to vaccinate. All health systems engaged in training for medical providers. Partners also host HPV 101 trainings, submit data to track progress, and set QI goals.

GOALS: QI projects aimed to (1) increase HPV vaccination rates among patients ages 9-13 at the health system level, (2) induce health system practice change through implementation of EBIs, and (3) increase provider confidence and quality of their HPV vaccine recommendation.

Community Health Worker Project ECHO Virtual Education

ABOUT: Project ECHO was used to engage and educate Community Health Workers (CHW) in Texas on HPV vaccination. CHWs can encourage community members to vaccinate and provide navigation and other resources to those they engage.

GOALS: CHWs are educated on their role in HPV cancer prevention, increasing positive attitudes and beliefs about the vaccine, and advocating for the vaccine in the community.



WHAT MAKES OUR PROVIDER EFFORTS IN TEXAS SPECIAL?

Year over year, our Texas health systems have increased HPV vaccination rates at a higher rate as compared to the overall ACS national HPV vaccination cohort. Texas staff leaders Laura Wood and Kaela Momtselidze reflected on their success. Here are some factors that are unique to Texas that could account for the improved results:



Experience: The Texas ACS team members are seasoned professionals with long tenure and extensive training on and experience with quality improvement.



Financial Support: The funding from the Lyda Hill Philanthropies has allowed for more capacity building funds going directly to health systems. These additional resources allow our partners to prioritize HPV vaccination among other competing priorities.



Trust: The Texas team has grown longstanding and deep relationships with health systems partners, many dating back to 2013. This allowed relationships to remain steadfast during and post COVID. Maintaining relationships involves standardized processes for collaboration, including required monthly meetings.



Flexibility: With the challenges and competing priorities presented during the pandemic, the Texas team quickly adapted, shifting QI engagement to virtual settings and allowing for flexibility to our collaborative process.



Formalized Partnership Structure: The Texas strategy includes a strong focus on two-year projects with funding, elements not common in other states, where projects are typically one-year in length and without funding.



Community Connections: The Texas team works with partners to strategically prioritize community outreach and education (i.e. back to school events, national health center week).

STAFF AND PARTNER TESTIMONIALS



Because of the grant-funded partnership with the American Cancer Society, we were able to implement quality improvement strategies to improve HPV Vaccination rates, which will have a long-term impact on reducing the number of new cases of six different types of cancer in our patient population.

Vicki Johnson, MPH

Director of Compliance, North Central Texas Community Health Care Center, Inc



I feel honored to have led my teams at the health centers...by providing my expertise and support, I navigated my partners to discover approaches that enhanced their potential. I am very proud of every one of them.

Frances Villafane

ACS, Cancer Support Strategic Partnership Manager

This collaboration allowed our clinical quality team to improve education efforts with staff and patients. It allowed us to expand our outreach to adolescents in the community to improve understanding of the necessity of HPV vaccine.

Geli King-Brown, M.S.

*Sr. Director of Quality Improvement
Healing Hands Ministry*



IMPACTING HPV VACCINATION RATES

2021 Participating Health Centers & Systems

A total of 10 Texas health centers and systems participated in the 12-month project and submitted final data in 2022. Of our 10 participating systems, 4 were integrated delivery systems (IDS) and 6 were Federally Qualified Health Centers (FQHCs). Seven North Texas 2021 participants were funded by Lyda Hill Philanthropies (LHP).

In 2021, quality improvement (QI) efforts were implemented at 130 clinic sites with a total active 9 to 13-year-old patient population of over 160,000. This patient population was far greater than last year, mostly because of the large hospital systems engaged in 2021. The health systems reported urban (60%), rural (30%), suburban (20%), and school-based clinic sites (30%) with all providing pediatric (100%) services and many providing family medicine (60%) services.



10 health systems with 130 implementing clinic sites



60% include rural sites



160,000 active 9 to 13 year-olds

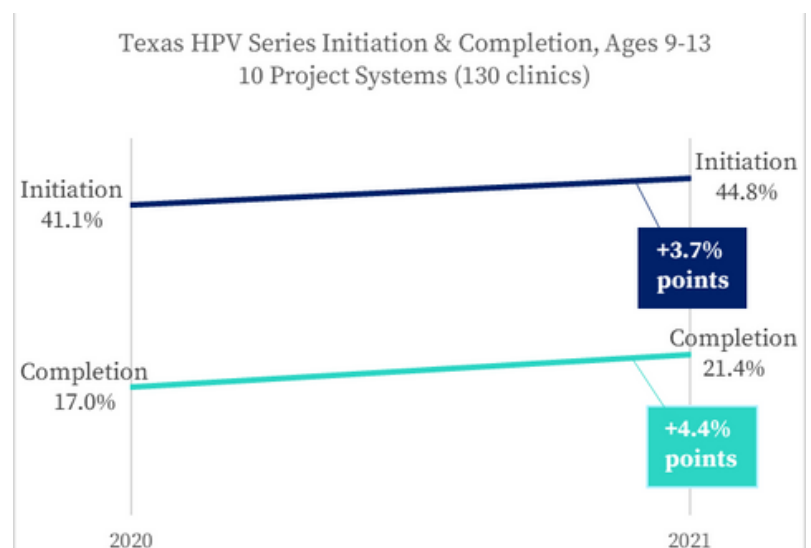


30% include urban sites

Impact on Vaccination

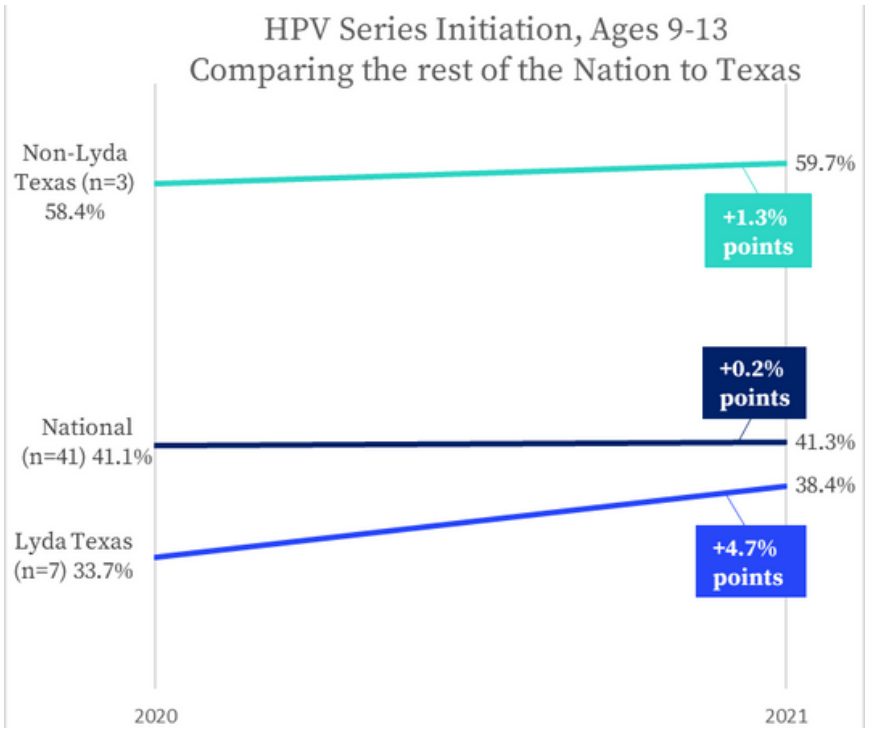
HPV vaccination series initiation increased from an average of 41.1% in 2020 to 44.8% in 2021, **a change of 3.7 percentage points.**

Texas health systems also saw a **4.4 percentage point increase for series completion**, from 17.0% in 2020 to 21.4% in 2021.



For the third year in a row, HPV initiation increases in **Texas outperformed the health systems participating** in similar (but not always funded) projects nationally.

Lyda Hill funded Texas systems had **lower average vaccination rates at the start of the project** but had **the highest vaccination rate change (4.7 percentage point increase)**. This highlights the need to continue to focus on North Texas.



COVID-19 continues to impact HPV vaccination rates nationally and across Texas. Nationally, we have seen maintenance of HPV vaccination initiation rates in 2021 (0.2 percentage point increase). Even though Texas has seen decreases in HPV vaccination rates overall, the Texas health systems in these projects saw increases (1.3 and 4.7 percentage point increases). To accomplish this impact, health centers implemented 42 EBIs. Systems reported training a total of 191 providers and 245 staff, with providers spending an average of 1.25 hours in training (270 hours total).



191 providers and 245 staff trained



42 evidence-based interventions



270 hours spent by providers on education



70% met some or all of their project goal



Staff Spotlight

Sheena Robertson
Cancer Support Strategic Partnership Manager

How did you support your partners in this work?

I reinforced the need for starting recommendations at age nine, made sure they were being intentional about chosen interventions, and did my best to provide them with the resources and structure needed to accomplish their goals.

What did your partners do that led to project success?

My partners focused a lot on EHR improvements and utilizing those enhancements to send client reminders starting at age 9 which was an age group that they didn't focus on before the Lyda Hill project.

HOSPITAL PARTNERSHIPS INCREASE REACH

2020 was the first time ACS partnered with hospitals and integrated delivery systems in Texas. These partners are much larger than FQHCs and can reach many more adolescents. Projects were two years long and funded. ACS conducted three interviews in Spring 2022 to explore IDS experiences participating in an HPV vaccination QI project. There were several key findings.



Passionate person as a driving force: Having a team member who was passionate about HPV vaccination and past collaboration with ACS contributed to engagement.



Funding matters: Funding helped ensure this work was prioritized at these large health systems.



Education and outreach were top interventions: Systems reported the EBI's with the greatest impact included provider communication, provider education, and patient outreach.



Well, at the very beginning of the pandemic, we simply were not seeing the population of patients that this project was intended to reach... it was a very gradual process of trying to get people back in for preventive care visits.



Just that I'm thankful... the funding helps keep it [HPV] at the forefront of the agenda rather than another QI task... Without this funding, I'm telling you, nobody would take the effort that we've gone through to chip away at the process and the experience around getting the HPV vaccine.



Reported Challenges:

- Leadership buy-in and contracts took time and effort
- COVID-19 closed clinics in 2020 and slowed visits in 2021
- Pulling the requested data
- Staff capacity to plan and provide provider education

ACS staff provided support with:

- Content expertise
- Providing resources
- Kept partners on task / meeting regularly
- Answering follow up questions and feedback

Plans to continue after funding ends: Systems were able to describe additional planned work after their project, including outreach events disrupted by COVID-19, creating a video to send to families, and targeting provider practices with low HPV vaccine performance.



Partner Success

The **Children's Health System of Texas** published in the prestigious **JAMA Network Open Journal**, describing a study conducted during their 24 month project. [Read it here.](#)

2022 Participating Health Centers & Systems



13 health systems with 95 implementing clinic sites



53% include rural sites



21,840 active 9 to 13-year-olds



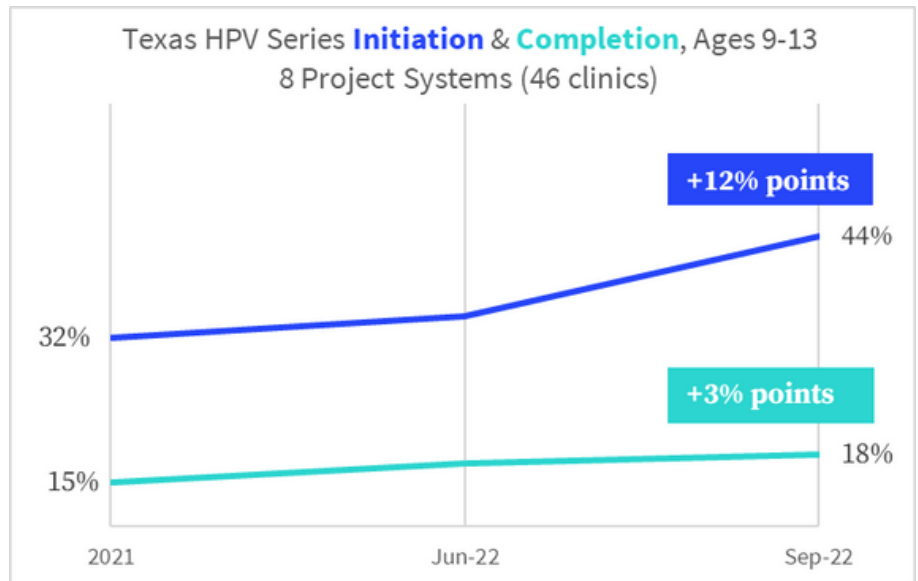
38% include school-based sites

A total of 13 Texas health centers and systems enrolled for a 12-month project in 2022. Of these, 11 were FQHCs and two were IDS. Six north Texas participants were funded by Lyda Hill Philanthropies this year or had carry-over funds from last year.

QI efforts were implemented at 95 clinic sites with a total active 9 to 13-year-old patient population of 21,840. This was a smaller patient population than last year, mostly because we worked with fewer large hospital systems, choosing instead to focus on FQHCs, which target uninsured and underinsured populations, and may be more likely to reach rural populations. Systems reported rural (53%), school (38%), urban (30%), and suburban (23%) clinic sites.

2022 Vaccination Rates

The average HPV series initiation at the start of 2022 was 32%. Average series completion started at 15%. As of September, among the 8 systems with high quality midpoint data, **series initiation had increased by 12 percentage points** and series completion **increased 3 percentage points**.



Examples of successes:



Showing providers their data matters: “...Individual provider vaccination rates has helped the team better understand how their individual vaccination practices has contributed to the overall HPV vaccination rates.”



Cancer stories change minds: “Many patients were interested in getting [the] HPV vaccine after learning about the benefits of getting the vaccine. Sharing [a] cervical cancer survivor's story was helpful to show how important the HPV vaccine is to preventing cancer.”

BUILDING COMMUNITY HEALTH WORKER (CHW) CAPACITY



24% of all Texas CHWs Educated on HPV Vaccination in 3 Years!

1,017

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

5,812









Continuing
Education credits
claimed (CEUs)

14

Cohorts with average
attendance of 32
participants

ECHO Content & Curriculum:

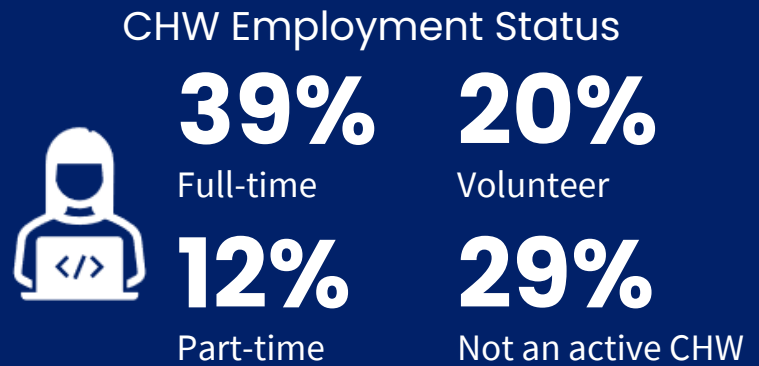
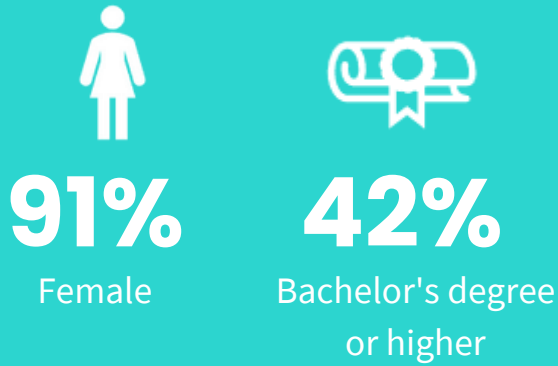
The CHW ECHO uses the [Project ECHO Model](#) to deliver eight sessions with in-depth didactic training about HPV, the safety and effectiveness of the vaccine, methods of communication, trusted tools and resources, and more. During each session, participants engage in activities such as role playing and games that assist with application of session topics. Participants present their experience advocating for the HPV vaccine to offer learning opportunities for other 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

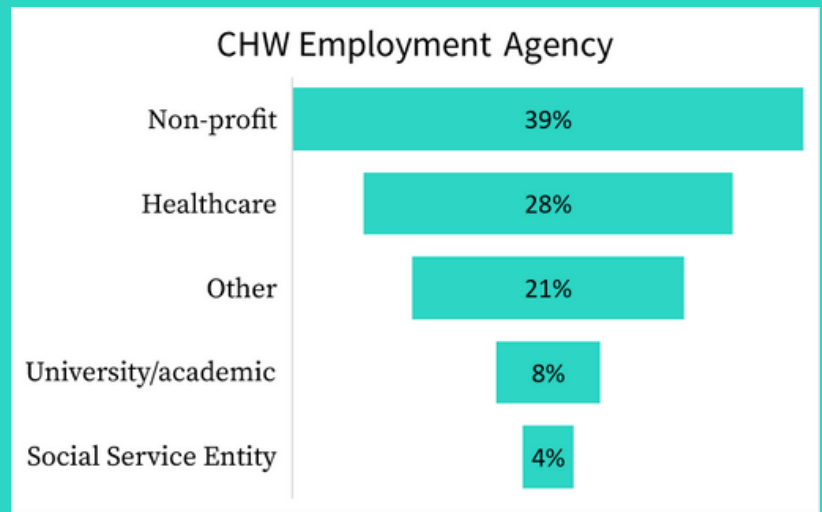
Including Spanish speakers:

Similar to 2020 and 2021, all content and coursework was offered in both English and Spanish. A Spanish speaking Community Health Worker Instructor (CHWI) and HPV vaccination expert from ACS facilitated the Spanish sessions, which kept messaging consistent amongst the ECHO cohorts. The Spanish cohort addresses cultural differences such as religion and gender roles, and personal experiences that affect how decisions regarding health are made. The focus on the Spanish speaking population provided participants a level of comfort the English cohorts could not.

Who are the CHWs reached & what do they do?



"I am a CHW instructor here in Fort Worth, Texas, and I also work for cancer care services as a community outreach coordinator...I've been a CHW since 2016."



CHW Roles

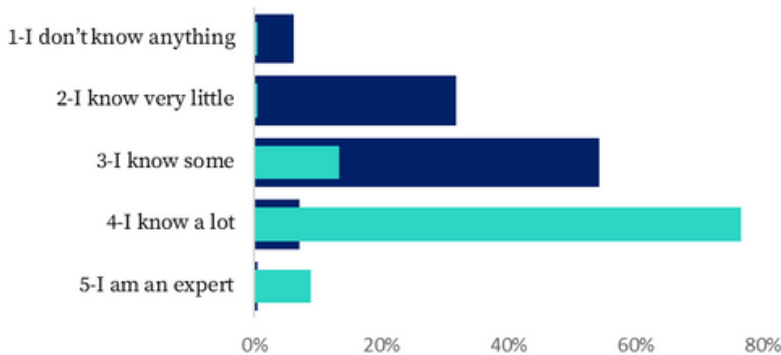
When interviewing participants earlier this year, ACS learned that CHWs have **various job titles, years of experience, and day to day work**. There was a mix of people working as a CHW full-time or working a full-time job with a CHW certification. CHWs also **serve a wide range of communities and clients**, including cancer patients, low-income communities, medically vulnerable individuals, pregnant women, minority groups, homeless individuals, and refugees.

The majority of **CHWs contribute to community, educational, or school-based events as part of their role**. Some events were related to health, but none were vaccine specific. Examples include classes or seminars, health fairs, outreach events, and pop-up events in spaces like the Salvation Army, churches, apartments, libraries, and community centers.

What impact have we had on CHWs?

I would just say if someone is questioning whether they should participate or not, I think it's really worth it and it's valuable. They definitely will be able to learn from others just being transparent with their stories or just different situations that possibly that person hasn't come across yet...

Perceived Knowledge Change from Pre and Post CHW ECHO, 2020-2022



Knowledge Change

2020-2021

48%

Increased knowledge on 4 question test

2022

67%

Increased knowledge on 12 question test

The large majority of those who participated in 2020-21 reported an increase in their HPV knowledge (85%), while just under half were able to demonstrate an increase in their HPV knowledge on our four-question test (48%). After responses for each question, the knowledge test was rewritten for 2022. With the new test, 67% of CHW demonstrated an increase in HPV knowledge in 2022.

In all cohorts, there were positive changes in vaccination beliefs, confidence discussing the vaccine, and decreased misconceptions of the HPV vaccine.

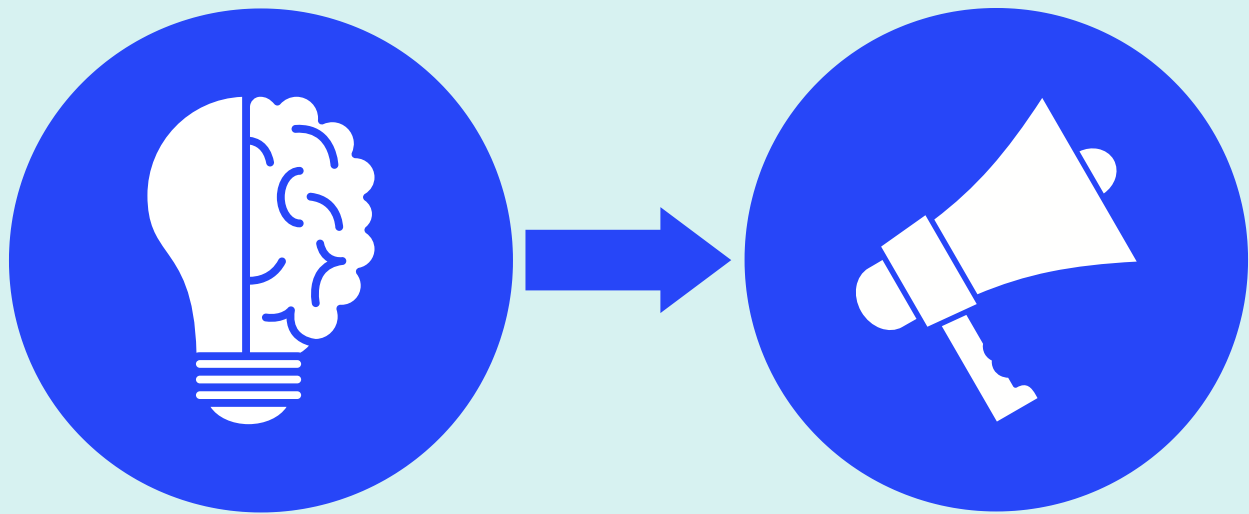
ECHO Feedback

...by giving us all the instructions and the resources and where to find them and how to bust [HPV vaccine] myth[s]...I felt when I left the ECHO very, very confident going back to the community...

CHWs found **ECHO content to be very valuable**, specifically learning how to address myths with communication strategies/resources. ECHO content had an impact on CHWs and their work by **increasing confidence communicating about HPV** with clients and community members.





CHWs suggested **additional resources** including palm-sized pamphlets, ACS-branded materials, materials for people with low literacy levels, media resources, and a video refresher for CHWs. There were **both success stories and challenges** when CHWs educated on HPV vaccination in their communities.

Moving from knowledge to action: ECHO 2.0



Community Health Workers are impactful because of their influence within their communities. While the inaugural ECHO educates CHWs about the HPV virus and vaccine, the **ECHO 2.0 equips CHWs to take that gained knowledge into their prospective 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.** CHWs must have completed a minimum of four sessions in the original ECHO. ECHO 2.0 does not spend much time educating on the HPV vaccine.

	Module 1 Workplan Development
	Module 2 Outreach and Collaboration
	Module 3 Activation and Implementation
	Module 4 Final Presentation

The **sessions and workbook guide participants as they complete tasks such as understanding their reach, selecting a community, researching and contacting stakeholders and executing an HPV vaccination presentation.** Development of logic models, elevator speeches, evaluations and goals are activities practiced and implemented by participants. CHWs are provided resources including an HPV 101 presentation that can be used during opportunities to speak. During the final session, participants provide presentations recounting community education experience.

A pilot cohort was held during the fall that concluded in early December 2022. In January 2023, staff will meet with participants to discuss in detail the ECHO 2.0 and how to best activate CHWs.

CHANGES IN PARENT AWARENESS OF HPV



HPVCFT has done two surveys of north Texas parents:

2019

The first survey targeted north Texas moms to explore HPV vaccine awareness and behavior

2022

The second survey assessed change in HPV vaccine awareness and behavior in north Texas moms and dads

Parents are familiar with HPV, the vaccine, and ACS' efforts

90%

of parents have an awareness of HPV

84%

of parents who know about HPV are aware of the HPV vaccine

77%

are aware of ACS's work with doctors, patients, and parents to raise awareness

When comparing parent responses in 2022 to 2019:

- More parents have vaccinated or intend to vaccinate their children
- More parents are aware of the message "HPV vaccination is cancer prevention"
- **Provider recommendations remain the biggest driver for vaccination**, though more parents receive information from the internet and social media when compared to 2019
- **Side effects and effectiveness** continue to be the main concerns, though more parents cited "my child does not need the vaccine" and "my religious beliefs" in 2022
- **"HPV vaccination can prevent more than 90% of HPV cancers when given at the recommended ages"** is still the most motivating message to parents
- While awareness of HPV and the vaccine were high, **less than a third of parents understand that HPV can cause multiple forms of cancer**
- 1 in three parents claim current events and **COVID-19 affected their vaccination plans**

2022 AWARENESS CAMPAIGN



For four years, ACS has conducted a targeted media push aimed to increase overall awareness and intent to vaccinate preteens across 26 counties in North Texas. For the first time this year, that campaign expanded to include other major Texas markets, including Houston, Austin, and San Antonio. The 2022 campaign continued to leverage traditional media and social media marketing to drive parents to the [HPV Cancer Free Texas webpage](#). The campaign garnered **23,000 website views** by 25,000 users and campaign content received over **18 million impressions**.

2022 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 presence among key investors and stakeholders

Audience

Parents of 9 to 12-year-olds (women aged 34-50) in 26 North Texas counties plus 11 additional counties in Houston, Austin, and San Antonio

Time Period

June 15 to August 31, 2022

Cost

\$200,000 (an increase from \$109,000)

Messaging

Messages in English and Spanish aimed to drive clicks to the website to receive information on the vaccine. In 2022, 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 2022 campaign again used a diverse media buying approach. Channels were selected to reach our target audience in a cost-effective manner. ACS used YouTube video ads, earned and paid media partnerships, social media marketing on Facebook and Instagram, display & native ads on popular websites, and website search engine marketing (SEM).



SEM



Native In-Stream



Display



Media Partnerships



YouTube



Facebook



Instagram



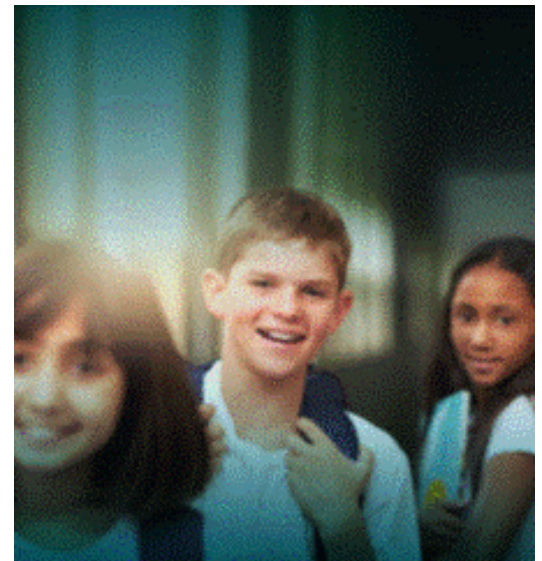
Site Visits

Paid Advertising on Facebook and Instagram

Facebook and Instagram advertising in 2022 was managed by Goodway Group and included Spanish messaging. Six different messages and imagery were used.

2022's winning campaign message:

- "Three Kids" was the top performing creative in both English and Spanish:
 - *Headline: "Help prevent more than 45,000 cases of cancer every year." / "Los padres podrían ayudar a prevenir más de 45,000 casos de cáncer por año."*
 - *Primary Text: "Help protect your child from 6 cancers." / "Ayude a proteger a su hijo contra 6 tipos de cancer."*
- Overall, Dallas-Fort Worth was the top performing geography in English. Houston was the top performing geography in Spanish.



YouTube Campaign

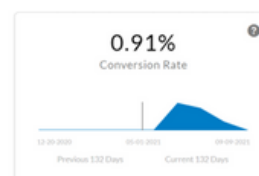
The campaign also saw another successful year on YouTube--with a content completion rate of 58.63% (exceeding the YouTube benchmark of 25-30%).

The viewability rate was once again high with 96.6% (the percentage of ads which are seen by a user). Demographic targeting included 35-54 year old males and females of all household income levels. Topics targeted included categories like health, cancer, news, parenting, etc.



Search Engine Optimization

Goodway Group managed Google Search paid advertising (SEM) for 2022. SEM efforts attracted 99,068 clicks at a 2.25% click-through rate. These clicks resulted in a significant increase in overall impressions in 2022. SEM advertising was done during the summer to catch parents searching for vaccine information during summer vaccination season. The top-clicked "keyword" was "hpv".

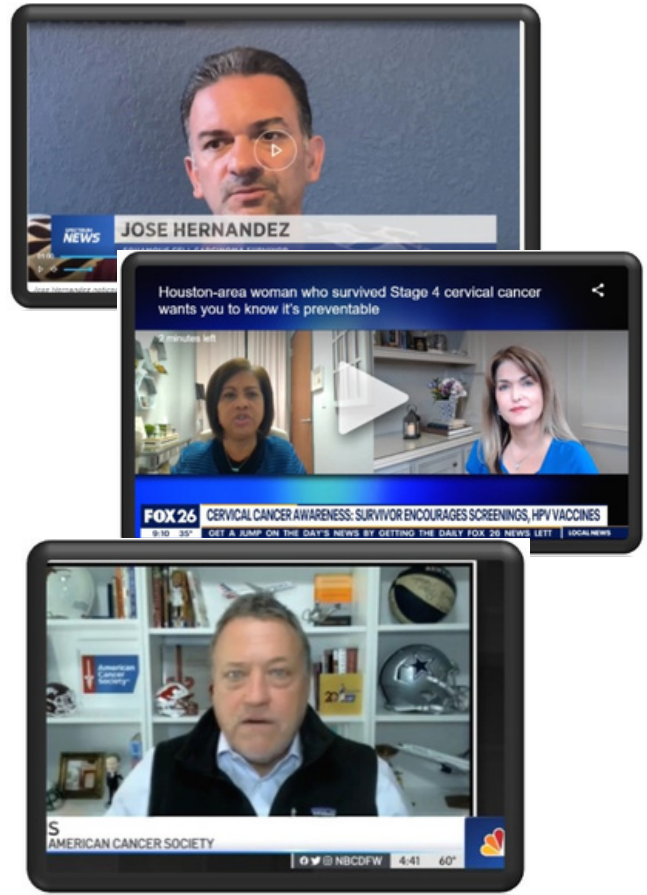


Media Partnerships: Earned Advertising Results

Earned media impressions totaled 1.3 million impressions via news outlets. The pictures here showcase some of the news stories garnered, featuring new spokespeople like Jose Hernandez, a father of 2 and survivor of an HPV-related cancer. Watch his story [here](#).

Yolanda Lopez is a cervical cancer survivor and mother who encourages other patients to get their children vaccinated. Hear more about her story [here](#).

Other highlights from earned media include stories centered around cervical cancer and how it can be prevented through the HPV vaccine. Read more from [CBS DFW](#) and [NBC DFW](#).



Display and Native Ads

HPV Cancer Free Texas worked with Goodway Group to deliver ACS HPV vaccination messages in banners and other types of on-screen display ads on high traffic websites. These efforts resulted in **11.25 million impressions and more than 10,990 website clicks**.



2022 Top Performing Native Ad

2022 Top Performing Display Ad

Most Notable Websites

- Microsoft.com
- Accuweather.com
- Foxnews.com
- Weather.com
- Dailymail.com
- USAtoday.com
- TMZ.com
- Mail.yahoo.com
- Realtor.com



COMMUNITIES & COALITIONS DRIVE CHANGE

The Texas HPV Coalition has over 100 members in 2022, 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.

In 2022, the coalition held virtual workgroup meetings and executed two biannual meetings. The coalition originally focused on four key priority areas: data and technology, systems improvement, provider education, and advocacy and awareness. Each workgroup selected one small and one large project to complete in 2022 but faced difficulty implementing those projects. Leadership noticed a need to revitalize the coalition to increase member investment and engagement. **To increase engagement and member buy-in, coalition workgroups were reorganized and new leadership roles were introduced.** Coalition membership nominated and voted to select the new leadership team beginning in January of 2023.

Revised Workgroups



Advocacy, Awareness & Provider Education



Data, Technology & Systems Improvement

New Coalition Leadership Roles

- 1 Coalition Chair
- 2 Workgroup Subject Matter Experts
- 2 Workgroup Coordinators
- 1 Annual HPV Summit Chair
- 3 Annual HPV Summit Planning Committee Members

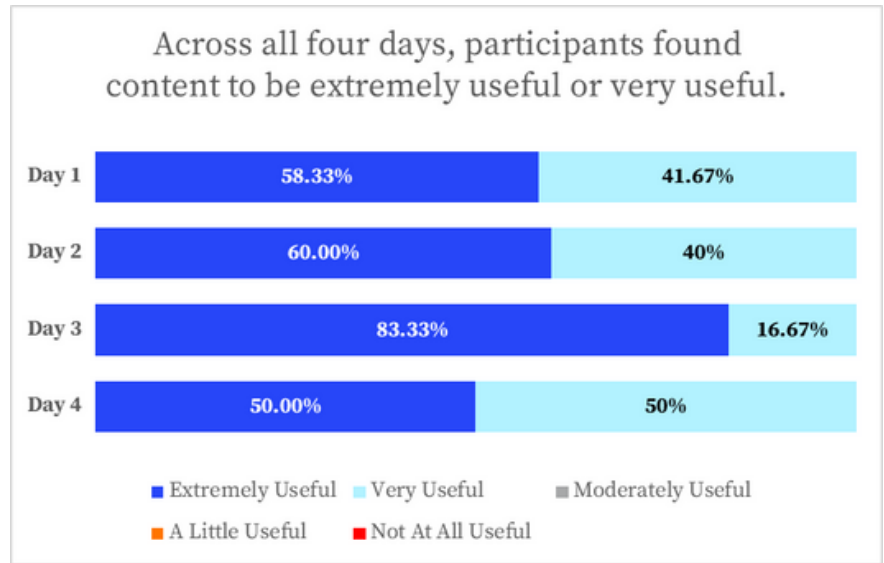
Summit Chair Blake Harper of MD Anderson

“ I was honored to serve ACS and the Coalition...helping to organize the 2022 Texas HPV Coalition Summit. It was a wonderful event that helped to pull together subject matter experts in HPV from all over the US as well as our partners right here in Texas. ”

2022 Texas HPV Coalition Virtual Summit

Led by a newly appointed Summit Planning Committee, the Texas HPV Coalition held a four-day virtual summit from Tuesday, Dec. 6th to Friday, Dec. 9th. 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 2022 Summit had 533 virtual attendees across all sessions.



HPV Data and Policy

Dr. Kirsten Matthews, Baker Institute for Public Policy

The history on how politics has impacted HPV vaccination uptake

Dr. Lauri Markowitz, CDC

National HPV vaccine policy, coverage data, and impact of the national HPV vaccination program



Unique Populations & Non-Traditional Partners

Dr. Stacey Griner and Dr. Nolan Kline, UT Health Science Center

How oral health providers can reduce missed HPV opportunities

Blake Harper from UT MD Anderson Cancer Center

How MD Anderson serves as a central point in implementing HPV-related projects with unique populations across the state of Texas



Age 9 Initiation and Parent Hesitancy

Dr. Gabrielle Darville-Sanders, National HPV Roundtable

Dr. Abbey Berenson, Dr. Jason Terk and Dr. Lindy McGee

HPV Roundtable updates on resources, research on age 9 initiation, and upcoming projects on health equity; A panel discussion with providers on advocating for the HPV vaccine at age 9



Leveraging Community Partnerships to Increase Access

Dr. Ana Rodriguez, UT Medical Branch at Galveston & Texas DSHS

Increasing HPV vaccination in medically underserved communities and low resource settings

CONCLUSION & LOOKING FORWARD



Mission: HPV Cancer Free Texas (HPVCFT) 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 2022.

Providers & Health Systems: Our partners improved HPV vaccination rates from 3-12 percentage points in the first six months. Thirteen health system partners, including 95 clinic sites and serving 21,840 9-13-year-olds, achieved an average increase of 12 percentage points in vaccination initiation and 3 percentage points in completion, as reported at midpoint.

CHWs: ACS reached nearly a quarter of CHWs in Texas with HPV vaccination education. HPVCFT hosted four Project ECHO training series for English and Spanish speaking CHWs. To date, ACS has trained a total of 1,017 CHWs in Texas. ACS also planned, developed, and launched a pilot of ECHO 2.0, to further activate CHWs to implement HPV vaccination education in the community.

Communications: In 2022, we increased our investment in the HPVCFT campaign and achieved over 18 million impressions in earned and paid media and resulted in more than 23,000 visits to the website over a targeted 11-week period. Parents were reached through a diverse array of tactics to increase knowledge, maintain awareness, and increase HPV vaccination intent. Recent results from the 2022 Pulse survey demonstrate broad knowledge among parents of the American Cancer Society's work to increase HPV vaccination.

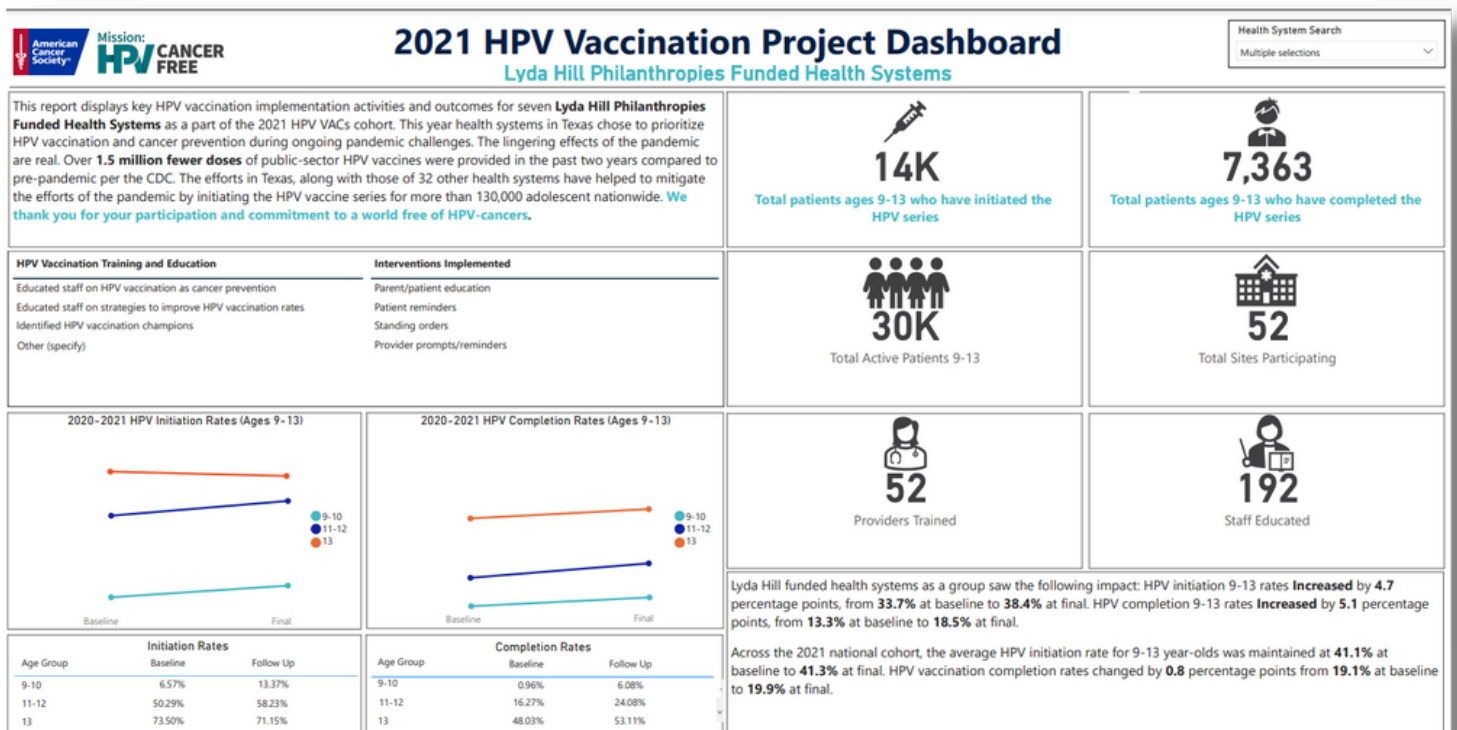
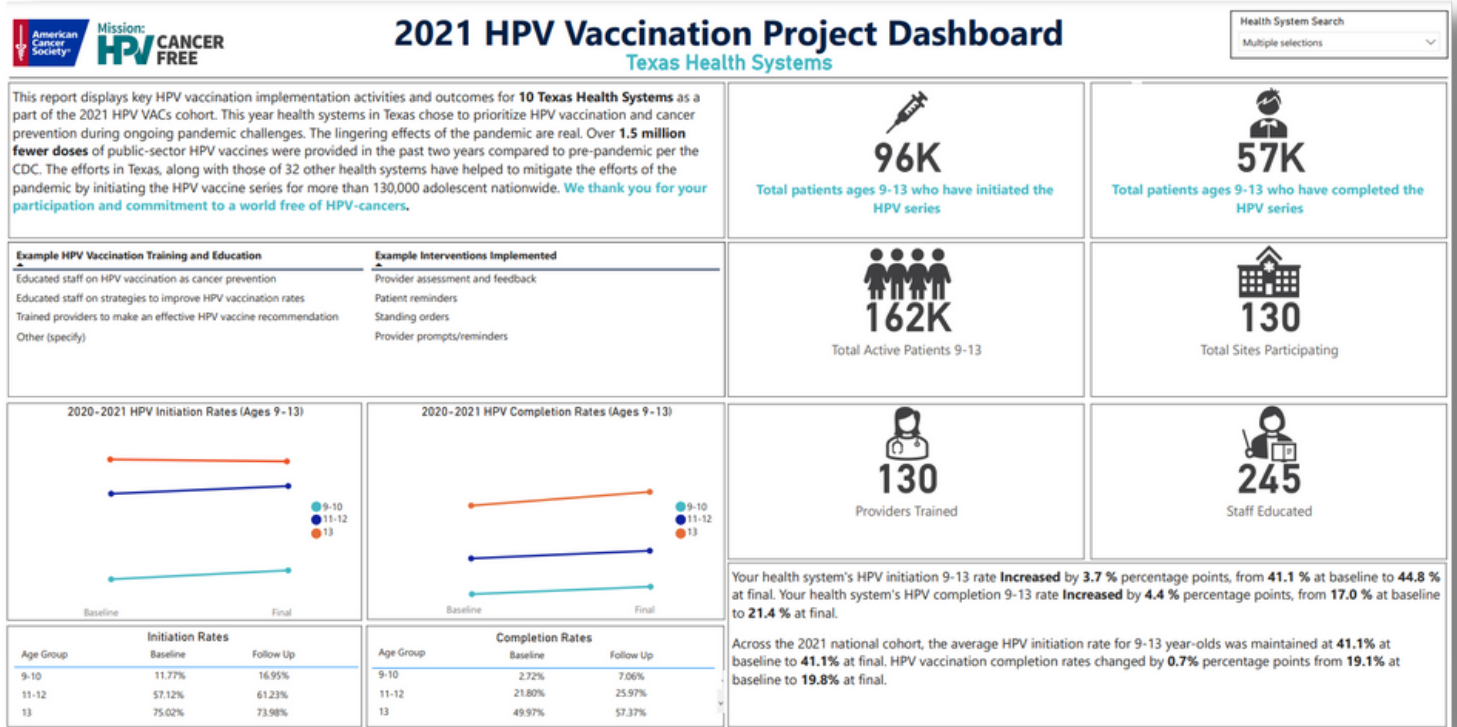
Coalition: ACS continues to lead and convene one of the largest HPV coalitions in the U.S. The Texas HPV Coalition and workgroups continued to meet virtually, culminating in a virtual summit in December 2022 that highlighted the accomplishments of the past year.

We are extremely proud of the successes and advances made possible through HPV Cancer Free Texas. Each of our core strategies are working in tandem to make HPV vaccination ubiquitous and reduce HPV related cancers in the years ahead. Our work does not stop and, in 2023, we are looking to sustain and grow our impact. Plans are underway to engage new and different provider groups, including enhanced engagement with school nurses and pilot testing pharmacy-based HPV vaccination programs. The generous support from Lyda Hill Philanthropies has solidly advanced the development of successful models for increasing HPV vaccination. ACS is working to replicate this work in other local communities across the nation.

Appendices

Appendix A: Project Impact Reports

All 2021 participating health systems received a project impact report in mid 2022. Visuals were also created to summarize the results for all systems participating in Texas and those with Lyda Hill funding. Please see examples of these last two dashboard reports below.



Appendices

Appendix B: QI Project Tools & Evaluation Methods

HPV Vaccination Data and Reporting Tool (DART) for Health Systems

In 2022, we transitioned data collection to the REDCap platform and renamed the tool the Data and Reporting Tool (DART). Similar to the former SASI (used for 2021 data), the DART serves as the primary data collection tool for ACS QI interventions, as well as a valuable implementation tool. It integrates comprehensive data collection with project activity planning, ensuring that all health systems that complete a DART have both the data necessary to evaluate the project and a data-driven plan to improve vaccination rates.

Measures: For both 2021 and 2022, ACS collected demographic data on each health system and vaccination rate data for adolescents ages 9-10, 11-12, and 13.

Frequency: For 2021 projects, ACS asked for data at two timepoints. For 2022 projects, systems were asked for four timepoints. The final submission for 2022 projects will be in at the end of January 2023.

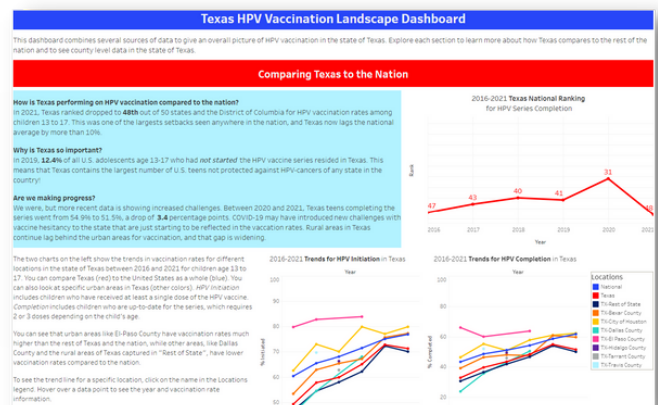
Quality Assurance: All submitted data is reviewed for quality and errors. For 2021 graphs and data, all ten health systems were included for final reporting. For 2022, eight of the thirteen health systems submitted high-quality data for all four timepoints. Cleaning and analysis were conducted in the statistical analysis program Stata. Visual charts or graphs were created in Excel.

The screenshot shows the 'Health System Details' form from the American Cancer Society. It includes the following fields and options:

- Health System Details:** This section is designed to gather basic demographic information about your health system and details about your participation in the project. It must be completed before moving on to other sections.
- This project focuses on:** HPV vaccination (selected), breast cancer screening, cervical cancer screening, colorectal cancer screening, lung cancer screening.
- Is this project funded?:** Yes (selected), No.
- Please indicate the amount of funding received:** Text input field with instructions: 'Round to the nearest dollar. Enter value without dollar signs or commas.'
- Health system legal name:** Text input field.
- "Doing business as" (DBA):** Text input field.
- City:** Text input field.
- State:** Dropdown menu with 'TX' selected.

Tableau Maps

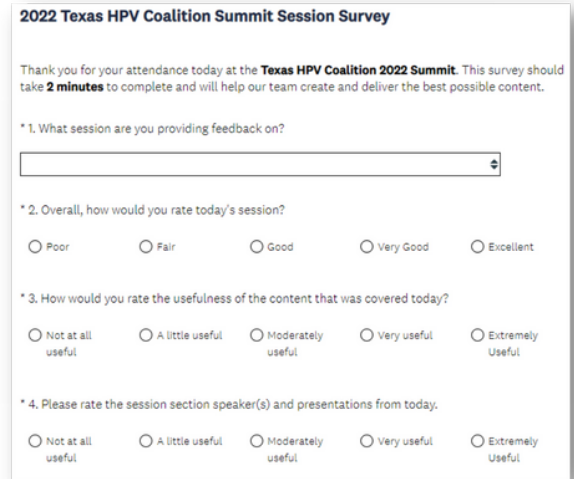
All maps representing the locations of participating health systems were developed in Tableau. The public facing Tableau webpage for [ACS HPV Vaccination](#) houses all the available maps. Filter *this map* to see the health systems that participated in Texas in recent years.



Appendices

Coalition Evaluation

Ongoing coalition efforts were not evaluated in 2022. We administered a brief post-session survey to attendees of the annual meeting in December using survey monkey. We received a total of 72 responses across the four days. For each day, we asked participants to rate the overall session, the usefulness of the content, the speakers, and one thing they found interesting. We also asked for contact information from individuals interested in joining the coalition. Excel was used to create report charts.



Communications and Marketing Metrics

Paid advertising, earned media, and influencer outreach used the following metrics:

- **Impression:** The number of times the ad was delivered. This is the most common unit of measurement in advertising. Impressions are the total number of times a person could have seen the advertisement
- **Engagement:** The engagement of an article/post is the sum of actions made by others (i.e. likes, shares/retweets, comments) on that article/post
- **Potential Reach:** The reach of an article/post represents the number of people who were potentially reached by the article/post (based on the follower count/s of the author/s)
- **Channel:** A social media page or any site where data (i.e. content) is published and monitored
- **Website clicks:** This is a measure of when a person took action on an ad

Metrics for 2022 were provided by the GoodWay Group and supplemented with a google analytics dashboard on website clicks managed by ACS.

Pulse Survey Methodology

Key Survey Objectives

- ➔ Gauge awareness of HPV and the vaccine for HPV
- ➔ Measure consumers' understanding of the HPV vaccine
- ➔ Understand awareness of ACS in promoting the HPV vaccine
- ➔ Measure parental familiarity with the HPV vaccine for their kids

Survey Approach

Summit Research administered a brief online questionnaire in April 2022.

- Respondents answered questions on their awareness and knowledge of the HPV vaccine
- Results were compared to the 2019 wave

The 2022 survey included **526 parents/guardians with children ages 9 to 18 in the 26 Dallas-area counties**. The sample included fathers for the first time. We added new questions on COVID-19 and for those who were unaware of HPV.

Appendices

CHW ECHO Evaluation

The CHW ECHO was evaluated using three surveys. All survey data was collected using SurveyMonkey. Analysis and visuals for this report were created in Microsoft Excel.

Pre-and-Post-Series Surveys

The pre-survey was sent to all attendees of the orientation session. It captured information on CHW demographics, baseline HPV vaccination knowledge, beliefs, and confidence. The post-survey was sent to those individuals who participated in multiple sessions to assess changes in knowledge and beliefs about the HPV vaccine, confidence discussing the vaccine, and feedback on the entire ECHO series. Respondents to these two surveys were matched so that the final data included only those individuals who completed both surveys.

Project Echo 2.0 CHW Clinic: Pre-Series Survey

* 1. How many doses of the HPV vaccine does the CDC recommend for adolescents?

1

2

3

2 or 3, depending on age

* 2. The HPV vaccine series can be started as early as what age?

Age 9

Age 10

Age 11

Age 12

* 3. The HPV vaccine series must be completed before what age to be considered "on time"?

Age 10

Age 11

Age 13

Age 16

17%

Prev Next

For the 10 cohorts conducted in 2020 and 2021, **796** individuals completed the pre-survey, 241 completed a post-survey, and **136** completed both a pre- and post-survey with matched identified information. For the 4 cohorts conducted in 2022, 379 individuals completed the pre survey, and 133 completed the post, and 87 had matched pre- and post-surveys. All reported data includes information only for **matched** responses. Attendance was tracked for each session manually.

2020 and 2021 knowledge test data demonstrated that the courses needs a more intense focus on the importance of the provider recommendation and the question on dosing by age was confusing. The new 2022 knowledge test included **12** questions and better allowed us to assess knowledge change among participants.

CHW Focus Groups

Three focus groups were conducted in Spring 2022 with participants from all past 10 cohorts. Each focus group contained 3-5 participants, and they were conducted in English, though some participants were also Spanish speaking. A total of 13 individuals participated in all 3 focus groups. These focus groups explored how CHWs work in their communities and obtained their feedback on participating in the ECHO series. Focus group transcripts were analyzed using MAXQDA, and a mix of deductive and inductive methods were used. Final high-level summaries and key quotes were exported into an Excel spreadsheet.