



# Environmental Scan: HPV Vaccination Uptake in Texas Pediatric Care Settings

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THE UNIVERSITY OF TEXAS  
**MD Anderson**  
**Cancer Center**

Making Cancer History®

# Objectives

- **Understand the purpose and methods of the HPV Vaccination Environmental Scan**
- **Identify research-based recommendations to reduce missed clinical opportunities for HPV vaccination in Texas children**
- **Identify current HPV vaccination-related activities statewide and compare them to the recommendations for increasing uptake**

# Background of Environmental Scan

## Accelerating HPV Vaccine Uptake:

Urgency for Action to Prevent Cancer



HPV Vaccines **Prevent Cancers.**

Why Are **So Few** U.S. Adolescents Vaccinated?



A Report to the President of the United States

from

The President's Cancer Panel

## President's Cancer Panel Report on HPV Vaccination

Vaccine series completed  
by only

**33% of girls**

**7% of boys**

# National Cancer Institute Awards



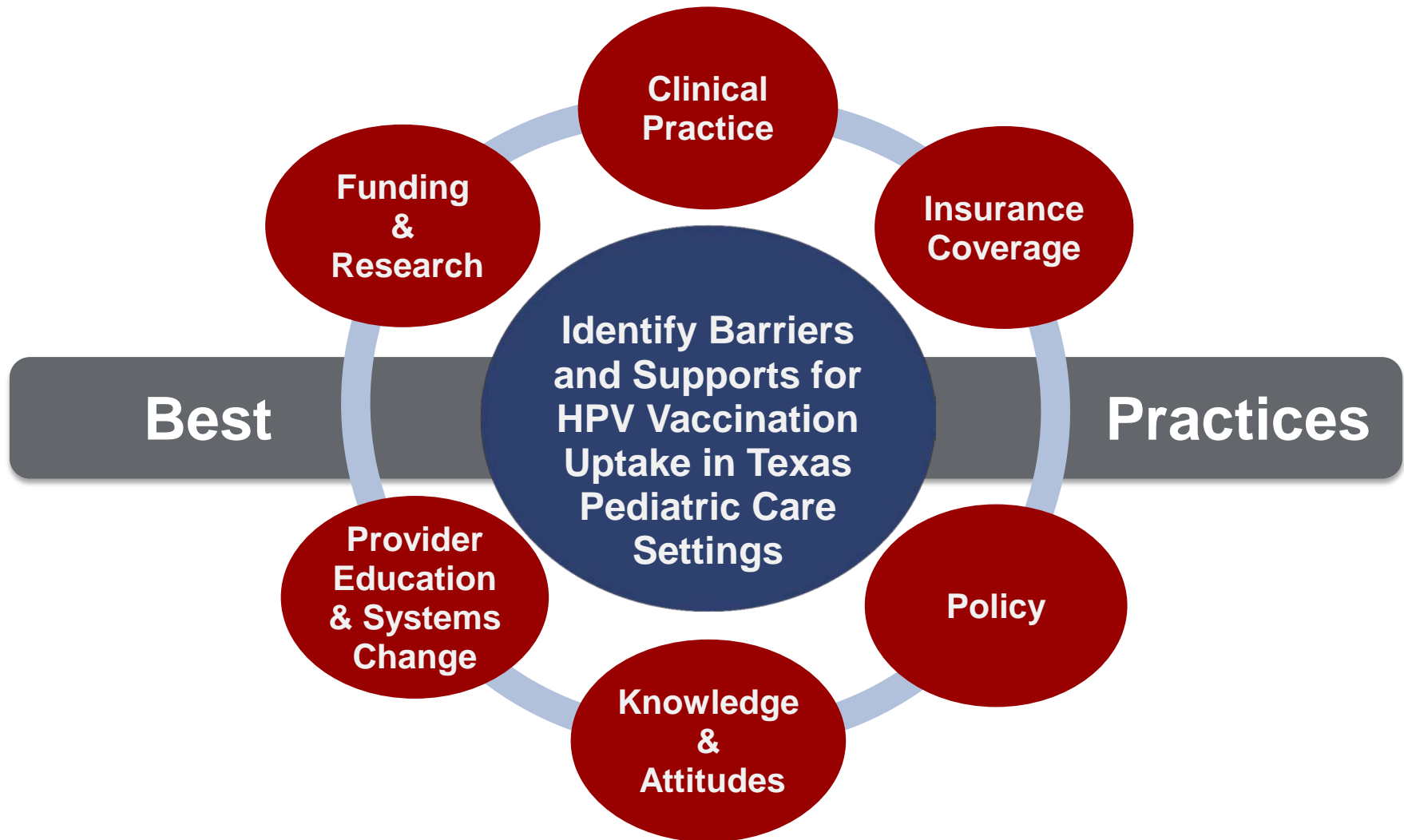
- **Short-term goals**
  - Local environmental scans
  - Develop/enhance linkages
- **Long-term goal**
  - Develop/expand applied research

# Scan Question

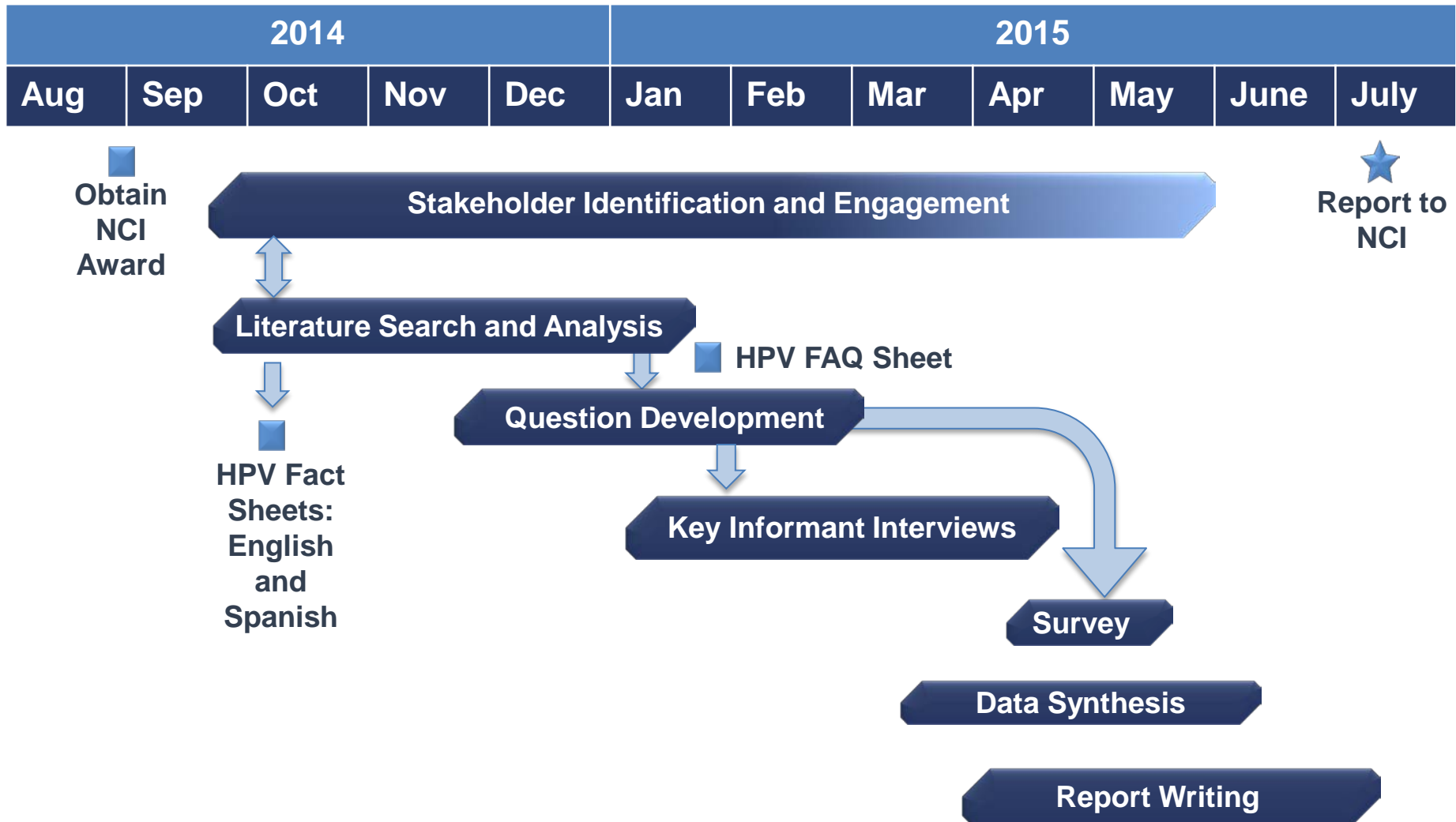
**What are the barriers and facilitators to HPV vaccination uptake in Texas pediatric care settings?**



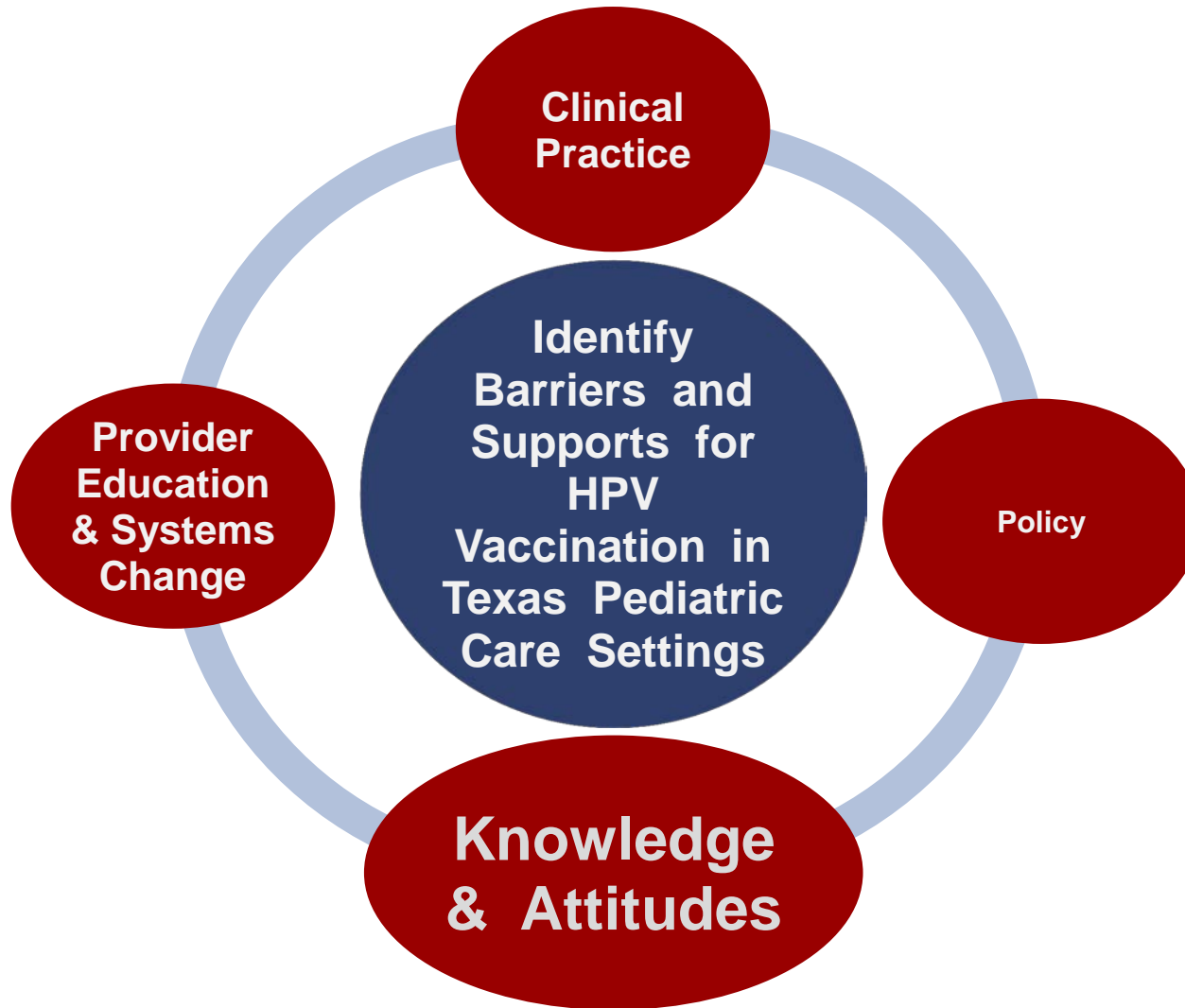
# Scan Domains



# Scan Timeline and Tasks



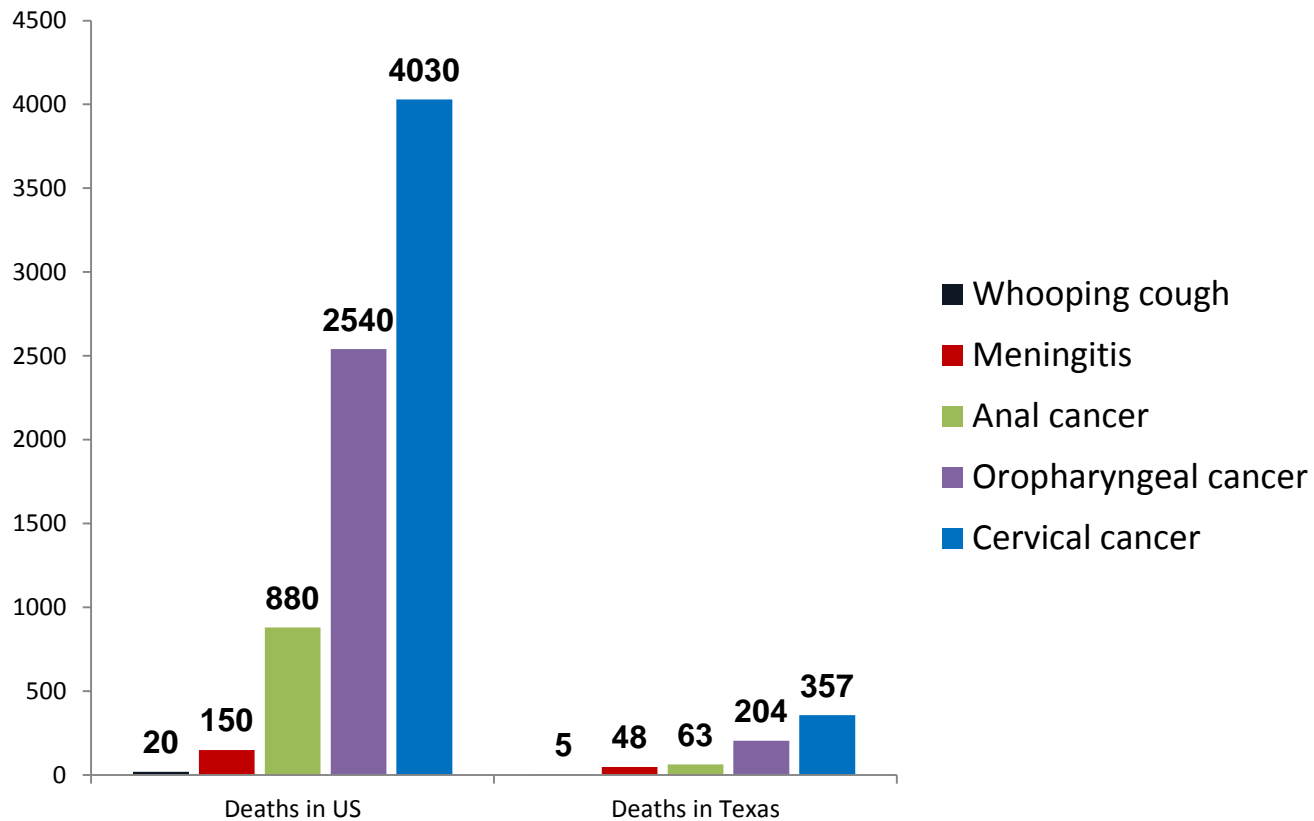
# Past Texas Research





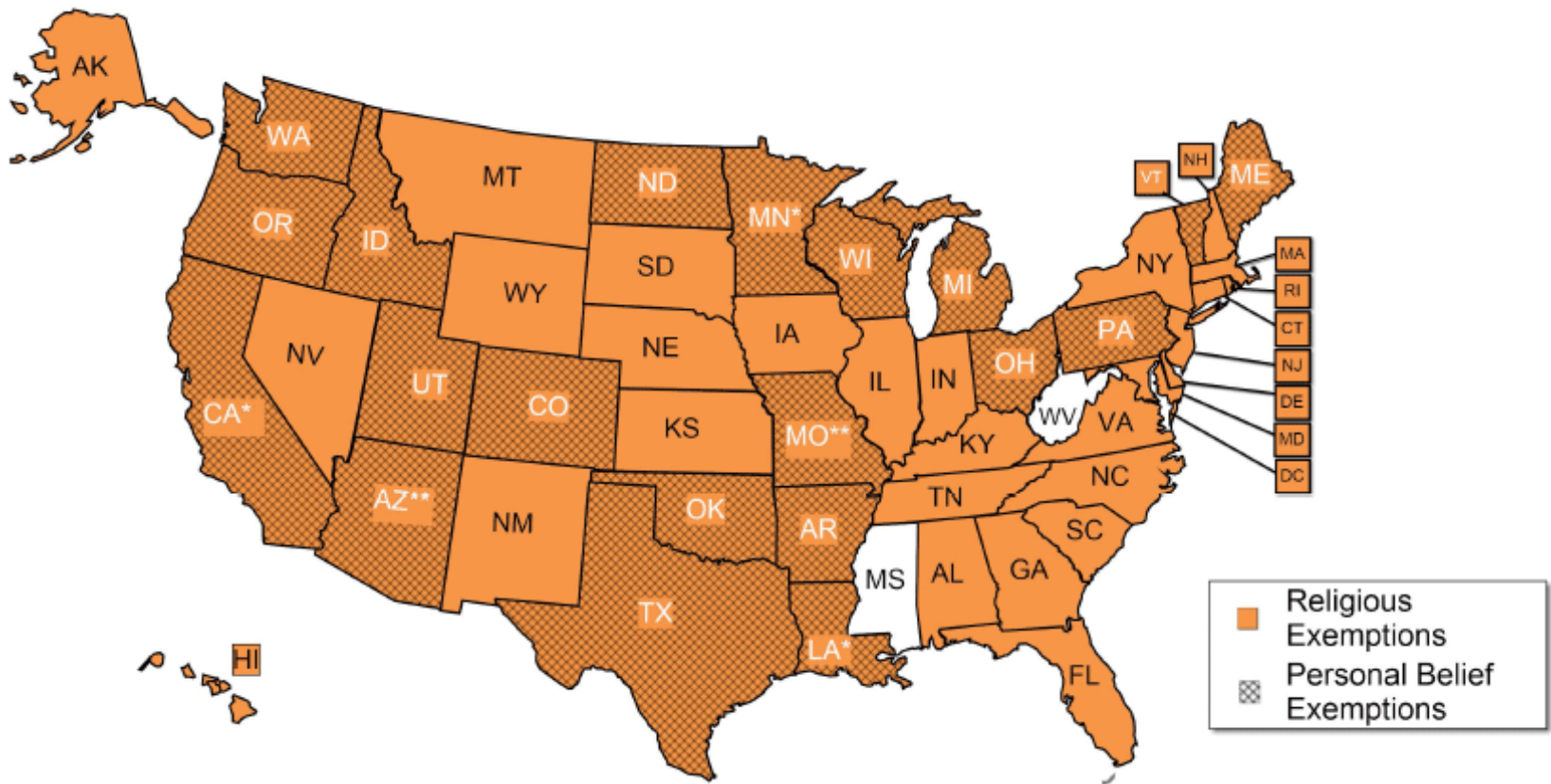
# Barrier: Knowledge Deficit

## Annual Deaths from Whooping Cough, Meningitis, and 3 HPV-Associated Cancers



# Barrier: Vaccine Exemptions

## National Vaccine Exemptions



National Conference of State Legislatures,  
Adapted from Immunization Action Coalition, June 2014

# Ethnic Populations

- **Cultural factors**
- **Immigration status**
- **Language barriers**

# Facilitators

## **For Providers:**

- **Being aware**

## **For Families:**

- **Being informed**
- **Receiving a recommendation**

## **For Cultural Groups:**

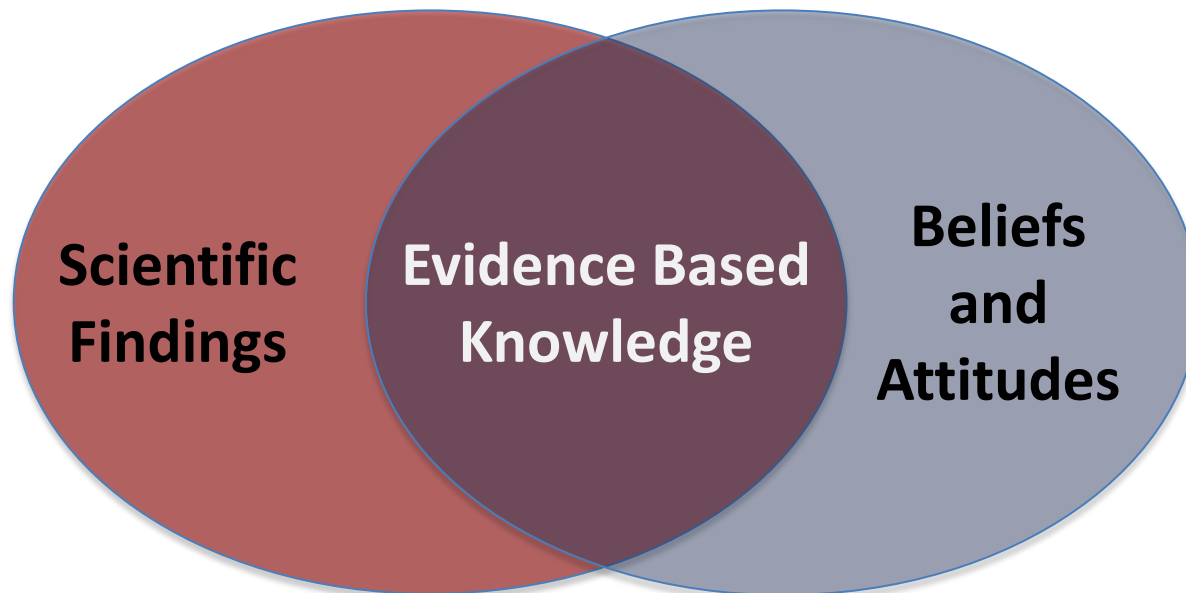
- **Appropriate educational materials and modes**

# Texas Literature Search Themes

- Knowledge deficits
- Attitude barriers
- Medical records



- Education
- Systems change



# Resource and Research Gaps

- **Males**
- **Other HPV cancers**
- **Provider education**
- **System or organizational factors**
- **Role of nurse/school nurse**
- **Multidisciplinary team interventions**
- **Communication science**
- **Special populations**





# Key Topics

- Observed challenges/ barriers
- Observed facilitators
- Provider practices
- HPV vaccine recommendation
- Recommendations to help the state increase uptake



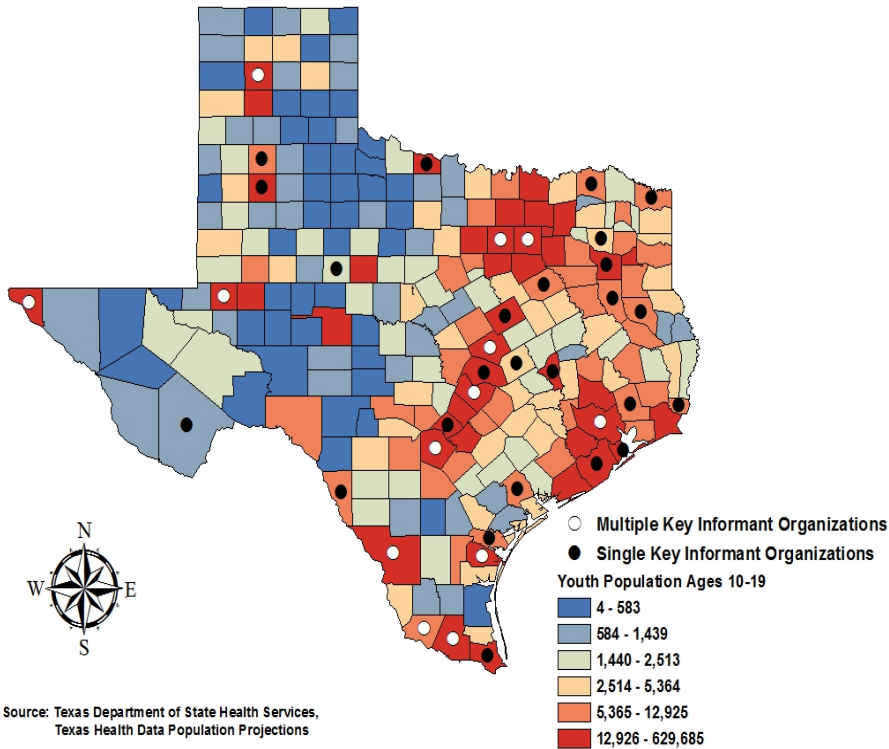


# Stakeholder Engagement

- Conducted 64 Key Informant Interviews
  - Healthcare providers (physicians, nurses, clinic administrators)
  - Public health researchers
  - Health educators/outreach specialists
- Web-based survey responses
  - Targeted providers of all levels and clinic administrative staff
  - 1132 responses received

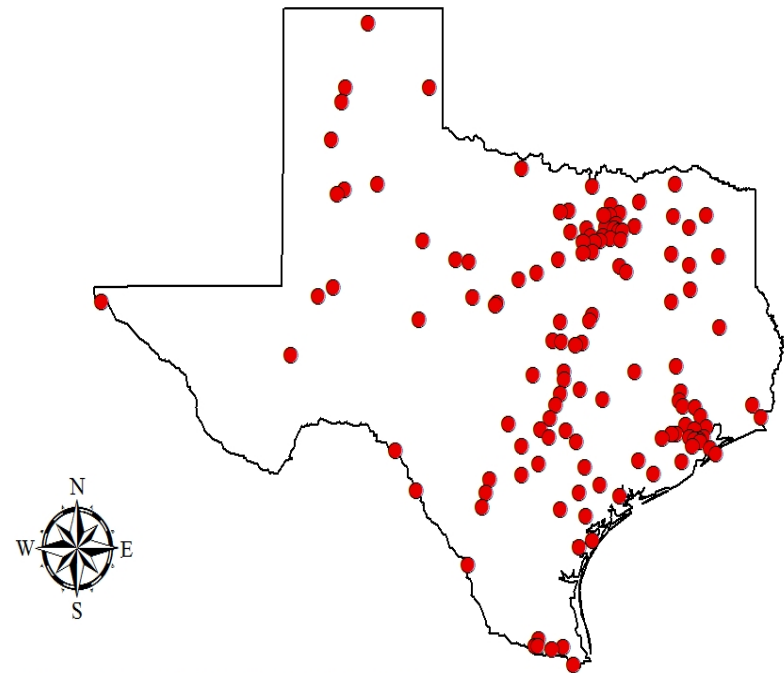
# Geographic Reach

Key Informant Interviews by Counties and 2014 Projected Youth Population



Source: Texas Department of State Health Services,  
Texas Health Data Population Projections

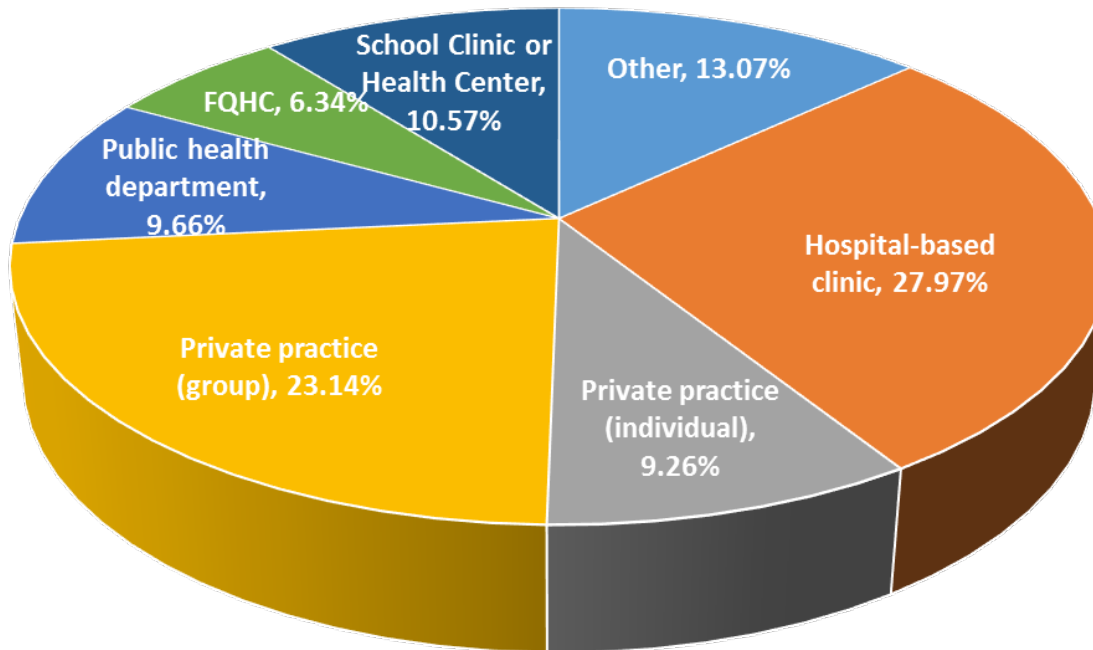
Locations of Texas Pediatric HPV Vaccination Survey Responses



2015 Survey for Improving Pediatric HPV Vaccination Rates in Texas.  
The University of Texas MD Anderson Cancer Center

# Survey Respondents

## Organization Breakdown of Surveys



## 728 Health Care Providers

- 41% Pediatricians
- 8% Family Practitioners
- 17% Registered Nurses

# Barriers



## Perception that child is at low risk

- Perception that child is not at risk for HPV-related disease
- Child is too young to vaccinate



## Safety Concerns

- Side effects of the vaccine (adverse events)
- Long-term effects of the vaccine (impact, onset of autism, reproductive issues or death)



## Lack of knowledge about HPV

- Benefits of vaccine (cancer prevention)
- Benefits of vaccinating at the recommended age
- Vaccine is a series of 3 doses

# Barriers

- HPV vaccine presented separately
- Provider hesitancy
- Time constraints during visit
- Misconceptions about the vaccine
- Lack of HPV education materials in various languages
- Obtaining consent for dose administration
- Identification of payer source

# Facilitators in Provider Practices

- Provide a strong recommendation
- Utilization of EMR tools (prompts, modules)
- Pre-visit planning
  - identify patients due or provide education
- Standing delegation for dose administration
- Clinic champions

# Facilitators for Completion

- Routine tracking of uptake rates
  - Informatics and steering committees
- Variety of recall and reminder methods:
  - Patient portal, mailed letters, postcards, text, phone call, industry-provided tools
- Active recall using a combination of methods is effective



# Additional Scan Findings

- Variation of HPV vaccine recommendation
  - Comfort level, knowledge and attitudes
  - Recommendation is a team effort
- Recommendation types:
  - Bundled- 57%
  - Separate- 29%
  - Other- 12%
  - Do not Recommend- 2%





# Key Informant Recommendations

## How to achieve 80% uptake?

- Increase patient education outside of the clinic
  - Cancer prevention
  - Utilize social media and engaging PSAs
  - Strategic messaging (timing is crucial)
- Improve provider education
  - Education on downstream effects
  - Communication tools to use in practice
  - Clear guidelines for HPV9



# Key Informant Recommendations

## How to achieve 80% uptake?

- Improve Immunization tracking
  - ImmTrac improvements
  - Optimize EMR utilization
- Increase access to immunizations
  - Extended clinic hours, nurse-only visits etc.
- Develop trusting relationships with school leadership



# Additional topics of interest

## HPV vaccine refusal

- Protocols to handle refusals
- Common parental concerns

## Provider education

- Common methods to deliver education
- Gap in educational materials

## Patient education

- Methods and materials being used

## Barriers for adults

- Safety-net issues (catch-up population)
- Cost and reimbursement

Thank You