



# Health System Showcase

Kelsey-Seybold Clinic is a large multi-specialty clinic system located in Greater Houston, Texas which includes 425 providers that care for a half-million patients annually in more than 55 medical specialties at 20 locations. They were the first accredited Accountable Care Organization (ACO) in the U.S.

## SPOTLIGHT ON

### **Kelsey-Seybold Clinic Houston, TX**



## Overview

- In 2013, leaders at Kelsey-Sebold realized that HPV vaccination rates were not on par with other childhood vaccination rates.
- Dr. Melanie Mouzoon, a pediatrician charged with leading quality improvement initiatives for adolescent immunization, took steps with the Quality Improvement (QI) department to collaborate with department chairs in ob/gyn, pediatrics, family medicine, internal medicine and oncology to improve physician recommendations for HPV vaccination and immunization rates.
- Over the past five years, Kelsey-Sebold's HPV initiation rates for 18-year-olds have increased from 49% to 67% and series completion rates increased from 27.3% to 54%. Kelsey-Sebold accomplished this while their patient population of 13-18-year-olds more than doubled in size.



## HPV Vaccination Rates

BASELINE RATES				POST-INTERVENTION RATES			
2013 RATES	TOTAL	FEMALE	MALE	2018 RATES	TOTAL	FEMALE	MALE
N=Adolescents Ages 13-17	7,029	3,713	3,316	N=Adolescents Ages 13-17	15,292	7,842	7,450
Initiation ≥1	49.3%	54%	44%	Series Initiation*	67.3%	66.9%	67.7%
Series completion ≥3	27.3%	34%	20%	HPV Series completion*	53.9%	54.4%	53.4%

### NOTE:

- Series initiation and completion are measured as by age 18 at Kelsey-Sebold.
- In 2017, the measures used by CDC changed to a focus on initiation and completion rates because of ACIP changes to the vaccine recommendation in 2016.

## Steps to Success

- **EDUCATED ALL PROVIDERS.** Educated all providers at all locations. Included primary care physicians and stressed the importance of bundling recommendations with reminder/recall adherence. Partnered with industry in accordance with organizational policies.
- **TRACKED PERFORMANCE.** Physician dashboards helped to track and improve individual performance.
- **RECOGNIZED BARRIERS.** Discussed and planned for barriers to increased HPV vaccination rates, which included training providers on how to address parental hesitancy.
- **ENGAGED QI PROFESSIONALS.** The quality improvement department collected transparent vaccination data and shared it with providers, pediatricians, the department chair, and the director of population health.
- **EMPOWERED CHAMPIONS.** An immunization champion helped to focus on the best immunization practices.



## Key Players



### Quality Department

Gathered data to create the provider dashboard



### Nurse Educators

Taught nurses about standing orders



### Chairman of Population Health

Managed the overall quality of care



### Merck

Partnered to provide staff education

## Leadership Champion

**Dr. Melanie Mouzoon**

**Managing Physician for Immunization Practice**




Dr. Mouzoon's passion for best practices in immunization began in 1993 when she began to evaluate rates in her own practice. She oversaw immunization practice management in Kelsey-Sebold's pediatric department and in 2000 expanded to oversee the entire multispecialty group. Standing orders were adopted in 2000, and HPV vaccination was added to the list as soon as it came out. Dr. Mouzoon is a member of the AAP, Texas Pediatric Society, Houston Pediatric Association, International Society for Travel Medicine, and The Immunization Partnership.



"As a system, Kelsey-Seybold is focused on the health of the entire population we serve, and we look to the long-term improvements in individual well-being.

Preventing cancer is great for the future of our patients and for our ACO model of care as well."

## Key Strategies & Interventions

DOMAIN	STRATEGY	POTENTIAL ISSUES	PROVIDER ACTION GUIDE #
	<b>Bundle the adolescent vaccines</b> Offer a vaccine bundle that places HPV between meningococcal and Tdap vaccinations.	Physicians need training on making a presumptive recommendation to be successful.	<b>Action #1:</b> Make a presumptive recommendation for cancer prevention.
	<b>Start at age 9</b> Offer HPV vaccination starting at age 9 and be complete by age 11.	Pediatricians originally feared increased parent pushback. Experience has shown otherwise.	<b>Action #3:</b> Minimize missed opportunities.
	<b>EMR alerts</b> Alerts flag patients ages 11 to 26 who are under-immunized according to the ACIP schedule.	Best practice alerts can be ignored by providers; Alert settings might start at age 11, not 9.	<b>Action #3:</b> Minimize missed opportunities.
	<b>Standing orders</b> Establish standing orders for HPV vaccination by nurses prior to seeing a provider.	There was variation in the willingness of providers to let nurses administer a vaccine prior to a physician visit.	<b>Action #4:</b> Take a team approach.
	<b>Provider education</b> Teach bundled and presumptive recommendation techniques. Focus first on providers with the lowest rates. Educate multiple specialties about HPV. Encourage learning from peers.	Anticipated barriers included provider hesitancy, misinformation, and weak recommendation habits.	<b>Action #2:</b> Answer parents' questions.
	<b>Quarterly dashboards</b> Provide physicians quarterly dashboards to monitor progress.	HPV rates compete for attention among other measures such as BMI calculation rates or other immunizations.	<b>Action #5:</b> Evaluate and sustain success.
	<b>Patient education</b> Send parent letters promoting HPV as cancer prevention. Send quarterly parent recalls to previous vaccination decliners. Use multiple communication channels to send recalls (messages, letters).	Maintaining the regularity of recalls can be challenging.	<b>Action #2:</b> Answer parents' questions. <b>Action #3:</b> Minimize missed opportunities.

## Next Steps

Several next steps will be taken to increase vaccination rates in future patient cohorts.

For patients, one important step is to automate the reminder/recall system to generate monthly messages through the patient portal. Other steps are to add a best practice alert for vaccination by age 9 and a tracking measure for vaccination by age 13.

For providers, one important step is to present training information and data at department meetings at least twice per year. Training will be provided on the strong, bundled recommendation and data will be provided on their collective progress. These steps will help Kelsey-Seybold to reach its goals of increased consistency in practice and continuous improvement.

## Lessons Learned

- 1. LEVERAGE PHYSICIAN AND NURSE CHAMPIONS.** Recruit physician and nurse champions throughout clinics as a source of information and recommendations.
- 2. COLLABORATE WITH OTHER DEPARTMENTS.** Embed the goal of improving HPV vaccination rates in the best practices and goals of your system. Find common ground, and align interests with different departments (e.g., align pharmacy with operations to ensure there is a sufficient supply of vaccines). Use every opportunity to make patients aware of the need for vaccination (such as at the opening of your new Cancer Center, or using best practice alerts).
- 3. AUTOMATE YOUR RECALLS AND CAPITALIZE ON PATIENT PORTALS.** The QI department is now setting up a calendar of recalls and reminders for HPV and other vaccines that will pull lists and automatically generate messages on a monthly basis. These will mostly go to patients using the patient portal, but in our system that is 77% or more of patients.
- 4. 9 IS FINE.** Anecdotally, our providers who start recommending at age 9 find that they experience less parental hesitation than starting the series at ages 11 or 12.



## How can you implement changes in your health system?

See the HPV Roundtable's *Clinician & Health Systems Action Guides* at <http://hpvroundtable.org/action-guides/>