

Data-Driven CME

Changing Behavior: Improving Adolescent Vaccination Rates



Direct One Communications

Confluent Healthcare Solutions

*A collaborative health-improvement model supported by Pfizer
Independent Grants for Learning and Change.*

Data-Driven Educational Model

- **Clinical performance dashboard (CPD):** baseline and quarter/trimester reports of each participant's clinical performance
- **Faculty consensus meetings:** representation from physician champions, experts in adolescent vaccination, medical education, case management and care coordination, clinical informatics, and quality improvement
- **Case-based, interactive, online educational activities:** directly address the most significant performance gaps
- **Slide library:** capturing the most recent information and clinical advances pertaining to vaccination and its impact on patient morbidity and mortality
- **Longitudinal outcomes report:** populated with aggregate, de-identified data showing trends in vaccination rates in each region and system wide

Adolescent Vaccination Demographics

■ Participating health systems:

- Billings Clinic (Billings, Montana)
- Cornerstone Health Care (High Point, North Carolina)
- Mercy Clinic (Norfolk, Missouri)
- Colorado Springs Health Partners (Colorado Springs, Colorado)

■ Participating physicians: 231 clinicians, including:

- 167 Pediatricians, 50 family medicine practitioners, 14 internists

■ Eligible patients:

- 76,821 Adolescents between 11 and 17 years of age
 - Tetanus, diphtheria, and pertussis (Tdap) vaccination
 - Meningococcal vaccination
 - Human papilloma virus (HPV) vaccination

Impact on Number of Patients Vaccinated

Vaccine	Number of physicians	Finished CME?	Number of eligible patients	Number vaccinated at baseline assessment	Number vaccinated at final assessment	Change from baseline in number of patients vaccinated	
Tdap	78	Yes	29,590	17,577	24,089	+ 6,512	+ 40.2%
	153	No	47,231	27,084	36,634	+ 9,560	+38.4%
Total	231	–	76,821	44,661	60,763	+ 16,102	+ 39.1%
Meningo-coccal	78	Yes	29,590	15,015	22,868	+ 7,853	+ 54.6%
	153	No	47,231	47,231	23,355	+ 11,264	+ 52.0%
Total	231	–	76,821	38,370	57,487	+ 19,177	+ 52.9%
HPV	78	Yes	29,590	7,635	12,662	+ 5,027	+ 66.7%
	153	No	47,231	11,457	18,199	+ 6,742	+ 59.9%
Total	231	–	76,821	19,092	30,861	+ 11,769	+ 62.3%

Conclusions

- **One third (78/231) of the physicians** completed all three stages of the Performance Improvement Continuing Medical Education (PI CME) program.
- **Adolescent vaccination rates:** 47,048 adolescents between 11 and 17 years of age in only four medical groups received vaccinations for Tdap, meningitis, and HPV in just 18 months.
- **Access to the Clinical Performance Dashboard alone** improved adolescent vaccination rates from 38% to 60% on average, with some groups reporting as much as 88% improvement.
- **Clinicians who completed CME** showed greater improvement, 40% to 67%, with some groups reporting as much as an 82% increase, as compared with those who did not.

In 9 out of 12 assessments, those who participated in CME showed greater improvement.