# Improving Population Health Among Adolescents

## Vaccines Help Protect Adolescents Against Some Serious and Deadly Diseases, Yet Some Adolescent Vaccinations Remain Below Target[1-6]

### Risks and Complications

#### Meningococcal Disease

- Even with treatment, **~15 out of 100** people who get uncommon but serious meningococcal disease will die[3]
- Among those who survive, **10 to 20%** of people will have serious and permanent complications, including brain damage, kidney damage, hearing loss, and amputation of arms, legs, fingers, or toes[3]

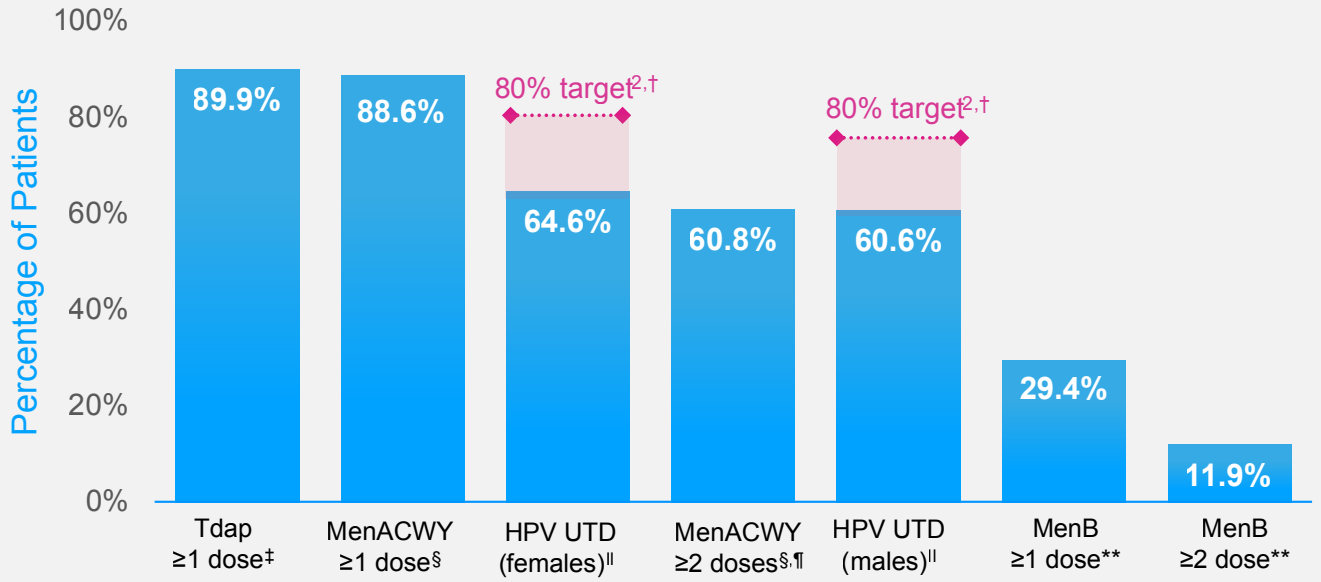
#### HPV

- HPV is the **most common** sexually transmitted infection in the US[4]
- HPV can lead to **6 types of cancer**, including cervical cancer[4]

#### Pertussis (Whooping Cough)

- **18,617 cases of whooping cough** were reported in the US in 2019[5]
- **Serious complications** of whooping cough in adolescents can include pneumonia; some may need care in the hospital if complications are serious[6]

### Vaccination Rates in Adolescents Aged 13–17 Years (2022)[1,*]




HPV=human papilloma virus; MenACWY=meningococcal ACWY; MenB=serogroup B meningococcal disease; NIS=National Immunization Survey; Tdap=tetanus, diphtheria, acellular pertussis; UTD=up to date.

*Adolescents in the 2022 NIS–Teen were born during January 7, 2004–January 10, 2010.[1]

†Healthy People 2030 target for adolescents aged 13–15 years.[2]

‡Includes percentages receiving Tdap vaccine at age ≥10 years.[1]

§Includes percentages receiving MenACWY or an unknown type of meningococcal vaccine.[1]

‖HPV UTD includes those with ≥3 doses, and those with 2 doses when the first HPV vaccine dose was initiated at age <15 years. There were ≥5 months minus 4 days between the first and second dose. This update to the HPV recommendation occurred in December 2016.[1]

¶≥2 doses of MenACWY or unknown type of meningococcal vaccine among adolescents aged 17 years at interview and does not include adolescents who received 1 dose of MenACWY vaccine at age ≥16 years.[1]

**Calculated only among adolescents who were aged 17 years at time of interview with vaccine administered based on individual clinical decision.[1]

**References: 1.** Pingali C, Yankey D, Elam-Evans LD, et al. Vaccination coverage among adolescents aged 13–17 years—National Immunization Survey–Teen, United States, 2022. *MMWR Morb Mortal Wkly Rep*. 2023;72(34):912-919. **2.** Healthy People 2030. Vaccination. Accessed April 1, 2024. https://health.gov/healthypeople/objectives-and-data/browse-objectives/vaccination **3.** National Foundation for Infectious Diseases. Meningococcal disease. December 2023. Accessed April 1, 2024. https://www.nfid.org/infectious-diseases/meningococcal-disease/ **4.** CDC. Genital HPV infection – basic fact sheet. April 12, 2022. Accessed April 1, 2024. https://www.cdc.gov/std/hpv/stdfact-hpv.htm **5.** CDC. Whooping cough or pertussis. March 13, 2024. Accessed April 1, 2024. https://www.cdc.gov/nchs/fastats/whooping-cough.htm **6.** CDC. Complications. August 4, 2022. Accessed April 1, 2024. https://www.cdc.gov/pertussis/about/complications.html

# Prioritizing Immunizations Across Quality Programs

## On-Time Vaccination Is Essential for Protection Against Vaccine-Preventable Diseases, and Most Quality Programs Include Specific Measures for Adolescence[1-6]

| | | Quality Payment Program | | |
|---|---|---|---|---|
| **Quality Measures** | **NCQA HEDIS[1]** | **MIPS[2]** | **MVP[2]** | **Medicaid Core[3]** |
| **Vaccine Specific** | | | | |
| Immunization for Adolescents* | ✓ | ✓ | | ✓ |
| **Vaccine Relevant** | | | | |
| Child and Adolescent Well-Care Visits* | ✓ | | | ✓ |
| CAHPS Survey | ✓ | ✓ | ✓ † | ✓ |

The CDC/ACIP/AAP recommend **on-time routine immunization** with all childhood vaccines according to the CDC schedule.[7,8]

AAP=American Academy of Pediatrics; ACIP=Advisory Committee on Immunization Practices; CAHPS=Consumer Assessment of Healthcare Providers and Systems; CDC=Centers for Disease Control and Prevention; HEDIS=Healthcare Effectiveness Data and Information Set; MIPS=Merit-Based Incentive Payment System; MVP=MIPS Value Pathway; NCQA=National Committee for Quality Assurance.

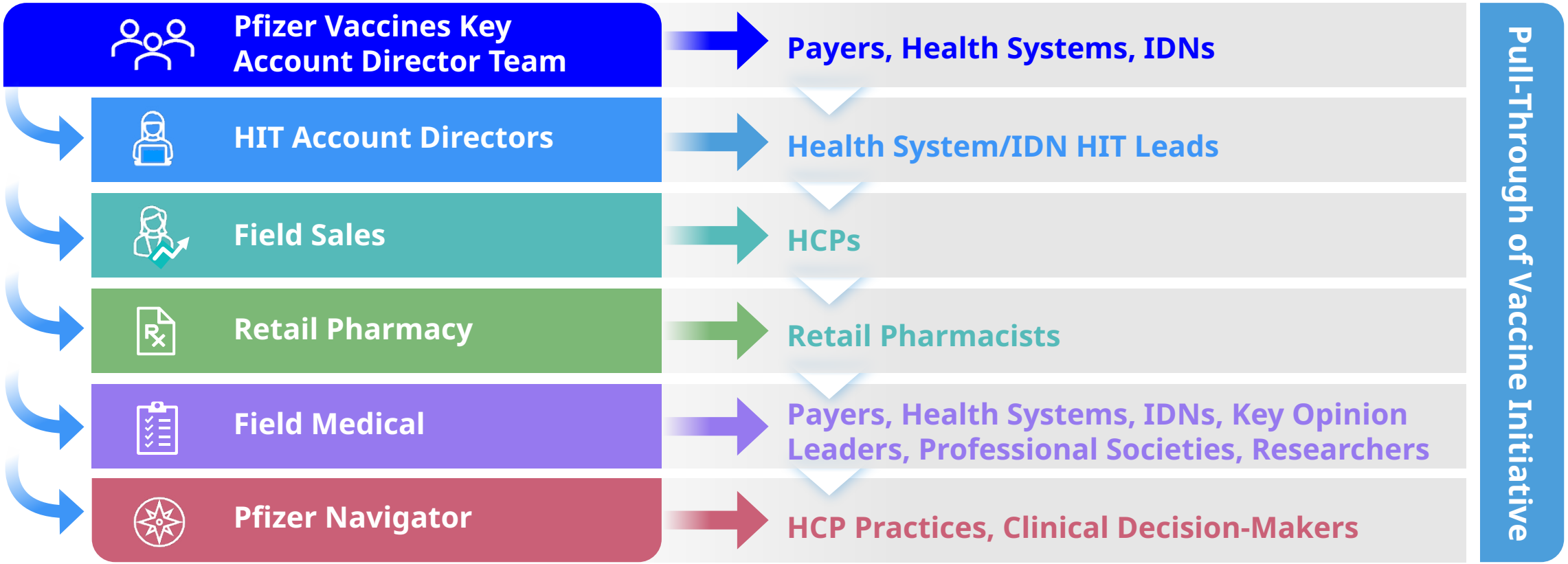
*Includes race and ethnicity stratification.[4,5]

†MVPs include Advancing Cancer Care, Adopting Best Practices and Promoting Patient Safety within Emergency Medicine, and Value in Primary Care.[2]

**References: 1.** NCQA. Summary table of measures, product lines and changes. Accessed April 1, 2024. https://www.ncqa.org/wp-content/uploads/Summary-Table-of-Measures-Product-Lines-and-Changes.pdf **2.** CMS. Medicare and Medicaid programs; CY 2024 payment policies under the Physician Fee Schedule and other changes to Part B payment and coverage policies; Medicare Shared Savings Program requirements; Medicare Advantage; Medicare and Medicaid Provider and Supplier Enrollment policies; and Basic Health Program. November 2, 2023. Accessed April 1, 2024. https://public-inspection.federalregister.gov/2023-24184.pdf **3.** Medicaid.gov. Core set of children's health care quality measures for Medicaid and CHIP (child core set), 2010-2024. Accessed April 1, 2024. https://www.medicaid.gov/sites/default/files/2023-08/2024-core-set-history-table_0.pdf **4.** NCQA. HEDIS MY 2023: see what's new, what's changed and what's retired. August 1, 2022. Accessed April 1, 2024. https://www.ncqa.org/blog/hedis-my-2023-see-whats-new-whats-changed-and-whats-retired/ **5.** NCQA. Race and ethnicity stratification for auditors. 2022. Accessed April 1, 2024. https://www.ncqa.org/wp-content/uploads/2022/04/NCQA-HEDIS-RES-Auditor-Resource-Guide-Version-1.pdf **6.** CDC. Why vaccinate. August 1, 2019. Accessed April 1, 2024. https://www.cdc.gov/vaccines/parents/why-vaccinate/index.html **7.** CDC. Recommended child and adolescent immunization schedule for ages 18 years or younger. November 16, 2023. Accessed April 1, 2024. https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf **8.** American Academy of Pediatrics. Immunizations. July 10, 2023. Accessed April 1, 2024. https://www.aap.org/en/patient-care/immunizations/

# Working with Pfizer

## Pfizer Takes an Integrated, Collaborative Approach to Provide Resources to Help Organizations Improve Their Vaccination Rates




**HIT Account Directors, Field Sales, Retail Pharmacy, Field Medical, and Pfizer Navigator teams assist the Vaccine Account Management team with pull-through of vaccine initiatives at the provider and individual practitioner level**

HCP=healthcare professional; HIT=health information technology; IDN=integrated delivery network.