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US Pediatric Influenza Vaccination by Pediatricians and Family Physicians/General Practice Physicians from 2006 to 2011

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Background

- U.S. recommendations for pediatric influenza vaccination have expanded substantially in recent years.¹
- Pediatricians (PDs), Family Medicine physicians (FPs), and General Practitioners (GPs) are the principal physician specialties that provide preventive care, including influenza vaccinations, for U.S. children.²
- Previous studies have shown that PDs and FPs/GPs have differing vaccination behaviors for other routine childhood vaccinations.³⁻⁵

Objective

- To compare pediatric influenza vaccine use by U.S. PDs and FPs/GPs during the 5 seasonal influenza seasons between 2006 and 2011

Methods

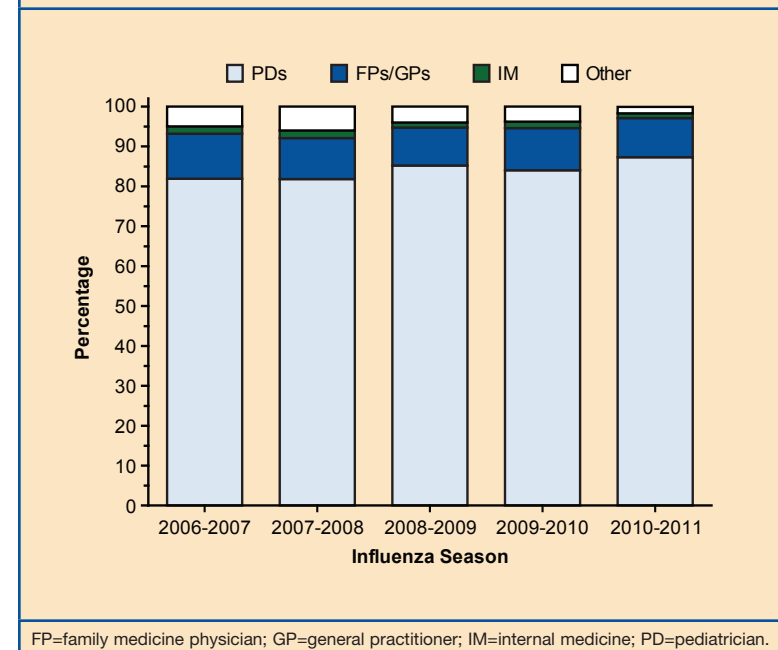
- Electronic private insurance healthcare reimbursement claims data representing more than 60% of all medical claims from the U.S. outpatient setting were collected and analyzed.
- Weekly counts of influenza vaccinations given to children 6 months through 18 years of age between August 1 and March 31 for the 2006–2007 through 2009–2010 influenza seasons and between August 1 and January 22 for the 2010–2011 influenza season were collected.
- Based on the available sample of claims and the known physician universe, vaccination counts for each season were projected (or scaled-up) to generate a national estimate of all influenza vaccinations administered in U.S. physician offices and submitted for private healthcare insurance reimbursement.

- Administrations of preservative-containing and preservative-free injectable trivalent inactivated influenza vaccine (TIV) and the nasal spray live attenuated influenza vaccine (LAIV) were identified by their specific Current Procedural Terminology codes.
- Only claims from privately insured children were available; administration of federally-purchased vaccine (ie, via the Vaccines for Children program) and vaccinations administered in settings where claims data are not generated were not captured.

Results

- In each season, 82%–85% of all pediatric seasonal influenza vaccinations were delivered by PDs, while 10%–11% were delivered by FPs/GPs (**Figure 1**).

Figure 1. Percentage of Influenza Vaccine Delivered to Children 6 Months to 18 Years of Age by Specialty



- For children <9 years of age, 83%–89% and 6%–11% of vaccinations were delivered by PDs and FPs/GPs, respectively.
- Among children 9 to 18 years of age, 73%–78% and 15%–18% of vaccinations were administered by PDs and FPs/GPs, respectively.
- For children 6 to 23 months of age, use of the thimerosal-free TIV increased over the 5 seasons from 39% to 65% of all influenza vaccinations administered by PDs and from 28% to 43% of influenza vaccinations administered by FPs/GPs (**Figures 2A and 2B**).
- For children 2 to 18 years of age, use of intranasal LAIV increased over the 5 seasons from 9% to 42% of all influenza vaccination administered by PDs and 3% to 12% of all influenza vaccines administered by FPs/GPs (**Figures 3A and 3B**).

- The timing of influenza vaccinations during each season was similar for PDs and FPs/GPs.

Conclusions

- **PDs deliver the vast majority of influenza vaccinations to children, but FPs/GPs also play an important role, particularly among older children and adolescents.**
- **Adoption of newer vaccine types such as LAIV and preservative-free TIV has been slower in recent years among FPs/GPs relative to PDs.**

References

1. Fiore AE, et al. *MMWR Recomm Rep.* 2010;59:1-62.
2. Hsiao CJ, et al. *Natl Health Stat Report.* 2010;(27):1-32.
3. Dempsey AF, et al. *J Adolesc Health.* 2009;44:387-393.
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Figure 2A. Influenza Vaccine Use in Children 6–23 Months of Age Among PDs, 2006–2011

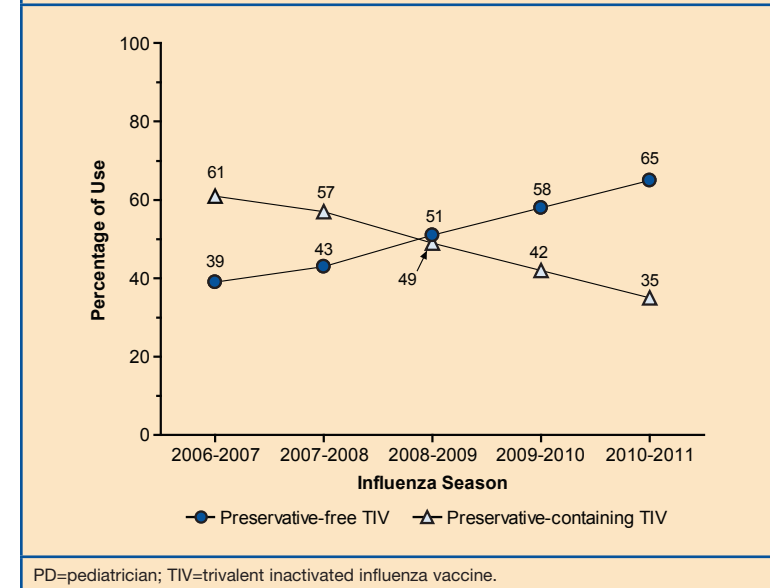


Figure 2B. Influenza Vaccine Use in Children 6–23 Months of Age Among FPs/GPs, 2006–2011

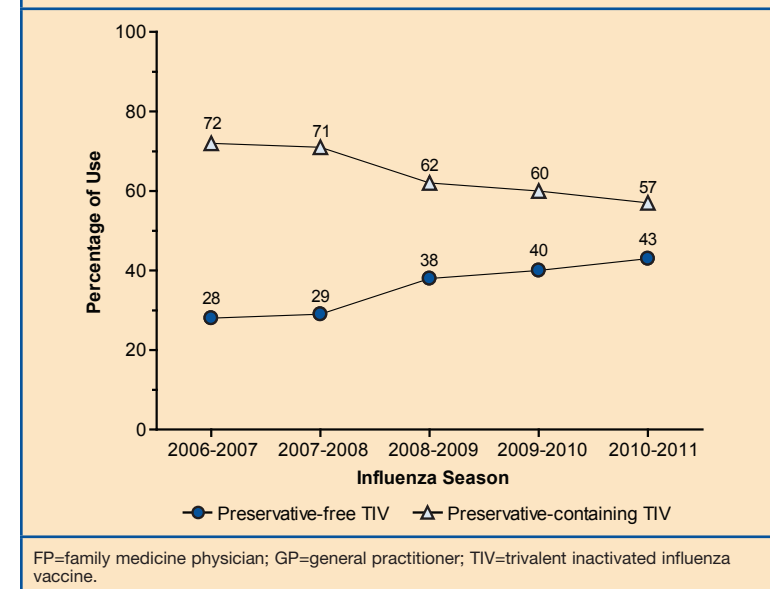


Figure 3A. Influenza Vaccine Use in Children 2–18 Years of Age Among PDs, 2006–2011

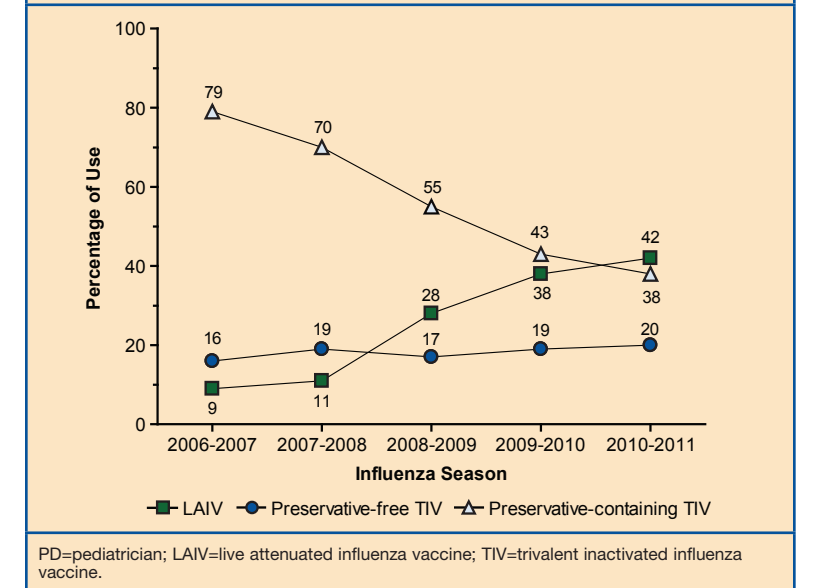


Figure 3B. Influenza Vaccine Use in Children 2–18 Years of Age Among FPs/GPs, 2006–2011

