Background
Since 2008, the Centers for Disease Control and Prevention Advisory Committee on Immunization Practices (ACIP) has advised that all children 6 months to 18 years of age receive annual vaccination against influenza as early as vaccine becomes available.  
- Children aged 6 months to 8 years may require 2 doses of influenza vaccine based on their prior vaccination status.  
- Failure to receive the 2-dose regimen can lead to suboptimal protection.  
- Despite recent increases in the influenza vaccination coverage among US children, coverage still remains suboptimal.  
- Limited data are available regarding the current use of influenza vaccines by US office-based pediatricians.

Objective
- To describe pediatric influenza vaccination behaviors and delivery after the 2009 influenza pandemic response and implementation of the expanded influenza vaccination recommendations in a geographically diverse sample of US pediatricians.

Methods
- A prospective observational study was conducted during the 2010-2011 influenza season using sites recruited from a random sample of licensed US pediatricians.
- In total, 105 offices tracked vaccination-related activities and implementation of the expanded influenza vaccination recommendations in a geographically diverse sample of US pediatricians.

Results
- The characteristics of all offices and children assessed in this study are presented in Table 1.

Table 1. Characteristics of Offices and Vaccinated Children

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Pediatric Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Location within the US, n (%)</td>
<td>Rural</td>
</tr>
<tr>
<td>Office demographic, n (%)</td>
<td>White</td>
</tr>
<tr>
<td>Practice distribution by percentage of doses from the NPC, n (%)</td>
<td>Other</td>
</tr>
<tr>
<td>Number of offices</td>
<td>100</td>
</tr>
<tr>
<td>Number of pediatricians</td>
<td>100</td>
</tr>
<tr>
<td>Number of vaccines administered</td>
<td>100</td>
</tr>
<tr>
<td>Percentage of vaccine doses administered to children aged 24-59 months</td>
<td>76–100</td>
</tr>
<tr>
<td>Percentage of vaccine doses administered to children aged 6-23 months</td>
<td>51–75</td>
</tr>
<tr>
<td>Percentage of vaccine doses administered to children aged 24-59 months</td>
<td>40-59</td>
</tr>
<tr>
<td>Percentage of vaccine doses administered to children aged 0-19 months</td>
<td>25-35</td>
</tr>
<tr>
<td>Percentage of vaccine doses administered to children aged 6-23 months</td>
<td>10-25</td>
</tr>
<tr>
<td>Percentage of vaccine doses administered to children aged 0-19 months</td>
<td>0-10</td>
</tr>
<tr>
<td>Percentage of vaccine doses administered to children aged 24-59 months</td>
<td>50-60</td>
</tr>
<tr>
<td>Percentage of vaccine doses administered to children aged 6-23 months</td>
<td>25-35</td>
</tr>
</tbody>
</table>

- Influenza vaccines were offered for a median of 239 days per year, with a median first available date of August 15, 2010, median last available date of April 11, 2011, and a median availability of 9 hours per weekday (Table 2).

Table 2. Office Influenza Vaccination Practices

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Pediatric Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours vaccine made available, median (range)</td>
<td>Mon</td>
</tr>
<tr>
<td>Days vaccine available to patients per year, median (range)</td>
<td>Sat</td>
</tr>
<tr>
<td>Days vaccine available to patients per year, median (range)</td>
<td>Mon</td>
</tr>
<tr>
<td>Number of of/ices</td>
<td>100</td>
</tr>
<tr>
<td>Office distribution of proportion of influenza vaccinations, %</td>
<td>Overall</td>
</tr>
<tr>
<td>Overall 6-23 mo</td>
<td>25</td>
</tr>
<tr>
<td>Overall 24-59 mo</td>
<td>25</td>
</tr>
<tr>
<td>Overall 5-8 y</td>
<td>25</td>
</tr>
<tr>
<td>Overall 9-18 y</td>
<td>25</td>
</tr>
</tbody>
</table>

- The overall 2-dose compliance rate among those who required 2 doses was 56%; compliance rates also declined with increasing age (Figure 3).

Conclusions
- Among pediatric offices, there was substantial interoffice variability in the delivery of influenza vaccinations to children.  
- A greater understanding of the techniques that pediatric offices employ to deliver influenza vaccine to children and identification of best practices could help improve pediatric influenza vaccination rates.

References