

Vaccination Programs: Client-Held Paper Immunization Records

Summary Evidence Table - Updated Evidence (search period: 1980-February 2012)

Study	Location and Intervention	Study population, Setting, Sample	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Follow-up time									
<p>Author (Year): Dickey (1992)</p> <p>Study Period: 1988-1989</p> <p>Design Suitability (Design): Greatest (Group Nonrandomized trial)</p> <p>Quality of Execution (# of Limitations): Fair (3)</p> <p>Outcome Measure: Adult vaccinations for Influenza Pneumococcal (PPV) Tetanus-diphtheria (Td)</p>	<p>Location: USA, San Francisco CA</p> <p>Intervention: Client held preventive services card ("Health Diary") including timing for vaccinations</p> <p>Comparison: Usual care</p> <p>Note: Intervention practices reinforced value of bringing card to appointments. Project was described to providers in all study practices</p>	<p>Setting: Study clinics in inner city family practice residency teaching clinics</p> <p>N=3</p> <table border="1"> <thead> <tr> <th>Group</th> <th>Clinics</th> <th>Chart reviews</th> </tr> </thead> <tbody> <tr> <td>Inter</td> <td>2</td> <td>200</td> </tr> <tr> <td>Comp</td> <td>1</td> <td>100</td> </tr> </tbody> </table> <p>Note: Number of clients with indicated and vaccinated status not reported (unable to calculate 95%CI) Study population: Adult clients Mean age 54-56 yrs Gender: 27-29% male 49-55% Spanish speaking</p>	Group	Clinics	Chart reviews	Inter	2	200	Comp	1	100	<p>Provider compliance with indicated vaccinations (vaccination rates among clients with indications for receipt)</p> <p>Note: 5 other adult preventive services were also evaluated</p>	<p><u>Influenza</u> I 46.2% C 53.9%</p> <p><u>PPV</u> I 47.4% C 50.0%</p> <p><u>Td</u> I 45.5% C 54.0%</p>	<p><u>Influenza</u> I 56.0 % C 70.6%</p> <p><u>PPV</u> I 67.9% C 54.8%</p> <p><u>Td</u> I 58.0% C 59.0%</p>	<p>Differences as reported <u>Influenza</u> -6.7 pct pts NS</p> <p><u>PPV</u> +15.7 pct pts NS</p> <p><u>Td</u> +7.5 pct pts P<0.05</p>	18 months
Group	Clinics	Chart reviews														
Inter	2	200														
Comp	1	100														
<p>Author (Year): Dietrich (1989)</p> <p>Study Period: 1984-1986</p> <p>Design Suitability (Design): Greatest (Individual randomized trial)</p> <p>Quality of Execution (# of Limitations): Fair (3)</p> <p>Outcome Measure: Adults ≥65yrs Influenza</p>	<p>Location: USA, small New England town</p> <p>Intervention: Client held medical record (Personal prevention checklist for influenza, blood pressure, cancer screening) Note: an informational letter was sent to clients along with the checklist</p> <p>Comparison: Client reminder letter for influenza vaccination</p> <p>Note: Treated comparison group</p>	<p>Study practice: N=1</p> <p>Clients: All clients of the study practice aged 65 yrs or older during study period with 12m or longer clinic history and 12 m follow-up N=125 eligible; 117 randomized Inter: 59 Comp: 55</p> <table border="1"> <thead> <tr> <th></th> <th>Control</th> <th>Intervention</th> </tr> </thead> <tbody> <tr> <td>Mean age</td> <td>75.4</td> <td>73.0</td> </tr> <tr> <td>% Female</td> <td>67</td> <td>68</td> </tr> </tbody> </table>		Control	Intervention	Mean age	75.4	73.0	% Female	67	68	<p>Proportion of study clients receiving influenza vaccine</p> <p>Note: Receipt of two other preventive services were also evaluated</p>	<p>I 36% C 39%</p>	<p>I NR C NR "Greater than 45% in both groups"</p>	<p>[0] pct pts "Differences between groups were not significant" Details not reported</p>	12 months
	Control	Intervention														
Mean age	75.4	73.0														
% Female	67	68														

Study	Location and Intervention	Study population, Setting, Sample	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Follow-up time
<p>Author (Year): McElligott (2010)</p> <p>Study Period: 2004-2006</p> <p>Design Suitability (Design): Greatest (Other design with concurrent comparison)</p> <p>Quality of Execution (# of Limitations): Fair (3)</p> <p>Outcome Measure: Childhood series</p>	<p>Location: USA, Nationwide</p> <p>Intervention: Client-held vaccination records</p> <p>Control: No client-held vaccination record</p>	<p>Study Population: National, validated survey of households with children 19-35 months of age (National Immunization Survey)</p>	<p>Proportion up-to-date with childhood vaccine series</p>	<p>No Record 78.6%</p>	<p>Vaccination Record 83.9%</p>	<p>+5.3 pct pts No CI calculated</p>	<p>NR</p>

Study	Location and Intervention	Study population, Setting, Sample	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Follow-up time
<p>Author (Year): Stevens-Simon (2001)</p> <p>Study Period: NR</p> <p>Design Suitability (Design): Greatest (Individual randomized trial)</p> <p>Quality of Execution (# of Limitations): Fair (2)</p> <p>Outcome Measure: Childhood series for infants of adolescent mothers</p>	<p>Location: USA, Denver CO</p> <p>Intervention: “health passport” including info re maternal and infant healthcare needs (e.g., vaccinations), accident prevention, child development. Plus client reminders (scheduled well-baby appt). Note: at each appt, passport was completed, returned to client with copies for provider and program administrator.</p> <p>Comparison: no passport. Note: both groups enrolled in comprehensive adolescent maternity program.</p>	<p>Setting: Colorado Adolescent Maternity Program (CAMP) at U. of Colorado Health Sciences Center</p> <p>Study population: CAMP participants N=188 consecutively delivered infants and their mothers</p> <p>N=71 mother-infants randomized to Intervention Group</p> <p>Total sample characteristics: Mean age 17.6 y o % on Medicaid: 92.0 % White: 45.0 % Black 32.0 % Hispanic 21.0</p>	<p>N (%) of infants under-immunized at 9 months of age</p>	<p>I 0% C 0%</p>	<p>I (n=43) 9.0% C (n=78) 9.0%</p> <p>Note: missing data, N=121; 43 in I, 78 in C</p>	<p>[0] pct pts</p>	<p>9 months</p>

Study	Location and Intervention	Study population, Setting, Sample	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Follow-up time
<p>Author (Year): Turner (1990)</p> <p>Study Period: 1987-1988</p> <p>Design Suitability (Design): Greatest (Group randomized trial)</p> <p>Quality of Execution (# of Limitations): Fair (3)</p> <p>Outcome Measure: Adult vaccinations Influenza Penumococcal (PPV)</p>	<p>Location: USA, Greenville NC; urban-rural; outpatient center associated with East Carolina University School of Medicine</p> <p>Intervention: Client held medical record (adult preventive services) + provider reminders (chart prompts)</p> <p>Comparison: Provider reminders (chart prompts)</p> <p>Note: Treated comparison arm (provider reminders)</p>	<p>Study internal medicine teaching clinic: N=1 Group (day) assignment of providers to condition Inter: 1 group of residents Comp: 1 group of residents</p> <p>Clients of study providers Inter: 177 Comp: 246</p> <p>Clients attending clinic are mostly rural, 60% black and 40% white, with high no-show rate (about 25%) due to transportation barriers</p>	<p>Vaccination rates for clients with indication for receipt Influenza</p> <p>Pneumococcal (PPV)</p> <p>Note: 4 other adult preventive services were evaluated</p>	<p><u>Comp</u> 29.0%</p> <p>24%</p>	<p><u>Intervention</u> 47.0%</p> <p>22%</p>	<p>+18 pct pts [95%CI: 8.7,27.3] p<0.002</p> <p>-2.0 pct pts [95%CI: -10.,+6.] p=0.34</p>	<p>8 months</p>

Studies Providing Additional Evidence

Study	Location and Intervention	Study population, Setting, Sample	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Follow-up time									
<p>Author (Year): O’Sullivan (1992)</p> <p>Study Period: NR</p> <p>Design Suitability (Design): Greatest Randomized clinical trial</p> <p>Quality of Execution (# of Limitations): Fair (3)</p> <p>Outcome Measure: Infants (mothers) Up to date vaccination coverage Childhood series</p>	<p>Location: USA, eastern US, large urban teaching hospital</p> <p>Intervention: Client-held immunization record (replaced) + Dedicated staff services + Client education + client reminders (appointments) + Social support</p> <p>2. Routine well-baby care + Social support + client-held immunization record without emphasis or f/u (\$2 to replace if requested)</p> <p>Note: Treated comparison group and multicomponent interventions</p>	<p>Setting: Study teaching hospital (large, urban): N=1</p> <p>Consecutive sample of underage mothers (17yrs or younger) and their well baby N=330 eligible N=243 (74%) randomized</p> <table border="1" data-bbox="737 600 1152 690"> <thead> <tr> <th>Group</th> <th>N</th> <th>Nanalysis</th> </tr> </thead> <tbody> <tr> <td>Inter</td> <td>120</td> <td>113 (94%)</td> </tr> <tr> <td>Comp</td> <td>123</td> <td>111 (90%)</td> </tr> </tbody> </table> <p>Characteristics: Maternal age: 16.3-16.5 yrs Black: 100% Medicaid: 100% Married: 0%</p>	Group	N	Nanalysis	Inter	120	113 (94%)	Comp	123	111 (90%)	<p>Proportion of infants UTD at 18 months</p>	<p><u>Comp</u> 18.0% (20 of 111)</p>	<p><u>Intervention</u> 32.7% (37 of 113)</p>	<p>+14.7 pct pts [95%CI= +3.5,+25.9] P<0.02</p>	<p>18 months</p>
Group	N	Nanalysis														
Inter	120	113 (94%)														
Comp	123	111 (90%)														

Study	Location and Intervention	Study population, Setting, Sample	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Follow-up time
<p>Author (Year): Thomas (2008)</p> <p>Study Period: 2001-2004</p> <p>Design Suitability (Design): Greatest (Group nonrandomized trial)</p> <p>Quality of Execution (# of Limitations): Fair (3)</p> <p>Outcome Measure: Pneumococcal conjugate vaccine (PCV)</p>	<p>Location: Australia, New South Wales</p> <p>Intervention: PCV reminder sticker in Aboriginal infants' CHPIR (Blue Book) + Parent education + Dedicated staff (Aboriginal Liaison Officers) + Provider education</p> <p>Note: maternity hospital staff were trained to identify Aboriginal newborns in order to place PCV reminder stickers in infants' Blue Book</p>	<p>Setting: urban hospitals, community health centers, GP practices in Western Sydney</p> <p>Study population: Aboriginal infants from Western Sydney, identified in Australian Immunization Register, Nov 2001-Oct 2004.</p> <p>Comparison population: Registry-based Aboriginal infants from other areas of Sydney</p>	<p>Proportion of infants receiving 1st dose (estimated from Figure 1)</p>	<p>I 30%</p> <p>C 50% (est.)</p>	<p>I 40%</p> <p>C 50% (est.)</p> <p>Not described but appears to be no change at end of intervention period)</p>	<p>+10 pct pts</p>	<p>1 year</p>
<p>Author (Year): Turner (1994)</p> <p>Study Period: NR</p> <p>Design Suitability (Design): Greatest (Group randomized trial)</p> <p>Quality of Execution (# of Limitations): Fair (4)</p> <p>Outcome Measure: Adult influenza vaccinations</p>	<p>Location: USA, Eastern North Carolina</p> <p>Intervention: wallet-sized health maintenance checklist (e.g., FOBT, mammogram, annual influenza vaccination after 65 y o)</p> <p>Comparison: computer-generated provider reminder attached to front of patient chart at each office visit</p> <p>Note: treated comparison group (Provider reminders)</p>	<p>Setting: Rural private practice offices (n=NR)</p> <p>44 physicians randomly assigned to either I or C groups</p> <p>Client Characteristics: N for I=estimated 440 (20 clients per 22 physicians who completed study); N for C=300 (20 clients per 15 physicians who completed study)</p> <p>Over 40 y o: 100% Male: 50%</p> <p>No other information provided.</p>	<p>Vaccination rates for clients with indication for receipt of influenza</p>	<p>I 17%</p> <p>C 20%</p> <p>Note: 4 other adult preventive services were evaluated</p>	<p>I 24%</p> <p>C 26%</p>	<p>+1 pct pt [95%CI: -5.4,+7.4] P=.51</p>	<p>1 year</p>