

Vaccination Programs: Community-Wide Education When Used Alone

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

Study	Location and Intervention	Population and Sample	Effect Measure	Reported Baseline	Reported Effect	Value use in Summary [95%CI]	Follow-up Time									
<p>Author (Year): Holzman 2005</p> <p>Study Period: Fall 1999</p> <p>Design Suitability (Design): Greatest (Other design with concurrent comparison)</p> <p>Quality of Execution (# of Limitations): Fair (3)</p> <p>Outcome Measure: Pneumococcal vaccine (PPV)</p> <p>Note: Comparison community received a CWE intervention</p>	<p>Location: USA; Montana (Billings, Great Falls)</p> <p>Intervention: Two before-after arms: a) Billings Montana Mass media (television and newspaper advertisements) + small media distribution + mailed reminder letters to a sample of Medicare enrollees without a record of PPV receipt b) Great Falls Small media distribution + mailed reminder letters to a sample of Medicare enrollees without record of PPV receipt</p> <p>Comparison: Mass media + small media compared to small media</p>	<p>Setting: Two selected study communities (cities)</p> <p>Study Population: Telephone survey participants (seniors and other persons at risk)</p> <p>Participants (participation rate)</p> <table border="1"> <thead> <tr> <th>Group</th> <th>N pre</th> <th>Npost</th> </tr> </thead> <tbody> <tr> <td>Billings</td> <td>297(21%)</td> <td>300(23%)</td> </tr> <tr> <td>GrtFalls</td> <td>300(23%)</td> <td>300(22%)</td> </tr> </tbody> </table>	Group	N pre	Npost	Billings	297(21%)	300(23%)	GrtFalls	300(23%)	300(22%)	<p>Proportion of survey respondents self-reporting receipt of PPV</p> <p>Group difference</p> <p>Study also examined differences in awareness of pneumococcal immunization</p>	<p><u>Billings</u> 28%</p> <p><u>Great Falls</u> 29%</p>	<p>34%</p> <p>35%</p>	<p>+6 pct pts [95% CI: -1, 13]</p> <p>+6 pct pts [95% CI: -1, 13]</p> <p>+0 pct points [95% CI : -7.6, +7.6]</p> <p>PPV awareness Billings vs GF OR 1.1 [95% CI 0.8,1.4]</p>	<p>1 month</p>
Group	N pre	Npost														
Billings	297(21%)	300(23%)														
GrtFalls	300(23%)	300(22%)														

Study	Location and Intervention	Population and Sample	Effect Measure	Reported Baseline	Reported Effect	Value use in Summary [95%CI]	Follow-up Time									
<p>Author (Year): Luthi 2002</p> <p>Study Period: 2000-2001</p> <p>Design Suitability (Design): Least (Before-after)</p> <p>Quality of Execution (# of Limitations): Fair (3)</p> <p>Outcome Measure: Influenza vaccination</p>	<p>Location: Switzerland; Canton of Vaud</p> <p>Intervention: Community mobilization + Mass media (television) + small media distribution + informational meetings for seniors+ provider education meetings</p> <p>Comparison: Before-after</p>	<p>Setting: Selected community</p> <p>Study population: Mail survey of a random sample of persons 65 years or older living in Vaud (population 96,657)</p> <table border="1" data-bbox="695 573 1054 667"> <thead> <tr> <th>Survey</th> <th>N</th> <th>(resp rate)</th> </tr> </thead> <tbody> <tr> <td>Pre</td> <td>2933</td> <td>(76%)</td> </tr> <tr> <td>Post</td> <td>3098</td> <td>(81%)</td> </tr> </tbody> </table>	Survey	N	(resp rate)	Pre	2933	(76%)	Post	3098	(81%)	<p>Proportion of survey respondents self-reporting influenza immunization</p> <p>Study examined campaign awareness</p>	<p><u>Pre</u> 58.0% (of 2772) N=1608</p>	<p><u>Post</u> 58.4% (of 2925) N=1708</p>	<p>+0.4 pct pts [95%CI:-2.2, +3.0] p=0.757</p> <p>52.7% knew about the program</p>	<p>10 months</p>
Survey	N	(resp rate)														
Pre	2933	(76%)														
Post	3098	(81%)														

Study	Location and Intervention	Population and Sample	Effect Measure	Reported Baseline	Reported Effect	Value use in Summary [95%CI]	Follow-up Time												
<p>Author (Year): McPhee 2003</p> <p>Study Period: 1998-2000</p> <p>Design Suitability (Design): Greatest (Group nonrandomized trial)</p> <p>Quality of Execution (# of Limitations): Fair (3)</p> <p>Outcome Measure: Hepatitis B series</p>	<p>Location: USA: Houston and Dallas TX, compared to Washington DC</p> <p>Intervention: Dallas Community mobilization (coalition with neighborhood and community activities and events) + small media + provider education</p> <p>Houston Mass media (television, radio, newspapers, billboards) + small media</p> <p>Comparison: Washington area Usual care (no community-wide education)</p>	<p>Setting: Vietnamese-American communities</p> <p>Telephone survey participants (parents) in study communities <u>Survey All communities</u> Pre 1508 (93%) of 1624 Post 1547 (92.5%) of 1673</p> <p>Record retrieval (child) among survey participants (parent or provider)</p> <p>Overall Pre 783 (52%) of 1508 Post 784 (51%) of 1547</p> <p style="text-align: center;"><u>Children with record</u></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Site</u></th> <th style="text-align: center;"><u>Pre</u></th> <th style="text-align: center;"><u>Post</u></th> </tr> </thead> <tbody> <tr> <td>Dallas</td> <td style="text-align: center;">307</td> <td style="text-align: center;">225</td> </tr> <tr> <td>Houston</td> <td style="text-align: center;">233</td> <td style="text-align: center;">315</td> </tr> <tr> <td>D.C.</td> <td style="text-align: center;">243</td> <td style="text-align: center;">244</td> </tr> </tbody> </table>	<u>Site</u>	<u>Pre</u>	<u>Post</u>	Dallas	307	225	Houston	233	315	D.C.	243	244	<p>Proportion of children with parent or provider record verified completion of 3 dose vaccination series for hepatitis B</p> <p>Multiple logistic regression analyses for the odds of receipt of 3 dose series by location (compared to D.C.)</p>	<p><u>Dallas</u> 82 (26.6%) of 307</p> <p><u>Houston</u> 66 (28.5%) out of 233</p> <p><u>D.C.</u> 92 (37.8%) out of 243</p>	<p><u>Dallas</u> 87 (38.8%) of 225</p> <p><u>Houston</u> 124 (39.4%) of 315</p> <p><u>D.C.</u> 92 (37.8%) out of 243</p>	<p>Adjusted change <u>Dallas vs D.C.</u> + 12.2 pct pts [95%CI : +4.6, +28.2] p=0.01 OR 2.15 [95%CI 1.2,3.9]</p> <p><u>Houston vs D.C.</u> +10.9 pct pts [95%CI : +4.3, +26.1] p=0.01 OR 3.02 [95%CI 1.6,5.6]</p>	<p>Dallas 3 years</p> <p>Houston 2 years</p>
<u>Site</u>	<u>Pre</u>	<u>Post</u>																	
Dallas	307	225																	
Houston	233	315																	
D.C.	243	244																	

Study	Location and Intervention	Population and Sample	Effect Measure	Reported Baseline	Reported Effect	Value use in Summary [95%CI]	Follow-up Time
<p>Author (Year): Shenson 2001</p> <p>Study Period: 1997-1998</p> <p>Design Suitability (Design): Greatest (Other Design with Concurrent Comparison)</p> <p>Quality of Execution (# of Limitations): Fair (4)</p> <p>Outcome Measure: Pneumococcal vaccine (PPV)</p>	<p>Location: USA: Dutchess County, New York</p> <p>Intervention: Community mobilization (coalition with community and health system activities) + small media (informational letter) + mass media (radio, local TV, newspapers) + Enhanced access (provision of PPV at flu clinic)</p> <p>Comparison: Enhanced access (provision of PPV at flu clinics)</p>	<p>Study population: Medicare recipients (65 yrs or older) in Dutchess County, N=27,981</p> <p>Targeted: Clients in 17 zip code region of Dutchess County, N=7961 with 6310 at analysis</p> <p>Comparison: Clients in 15 zip code region (rest of Dutchess County), N=20,771</p>	<p>Proportion of Medicare clients with claims data for PPV receipt</p> <p>Targeted clients with claims</p> <p>Comparison clients with claims</p>	<p><u>1996</u></p> <p>20.4% 1312 of 6432</p> <p>18.1% 3817 of 21089</p>	<p><u>1997</u></p> <p>32.2% 2032 of 6310</p> <p>26.7% 5546 of 20771</p>	<p>+3.2 pct pts [95%CI 0.9, 5.5]</p>	<p>1 year</p>

Study	Location and Intervention	Population and Sample	Effect Measure	Reported Baseline	Reported Effect	Value use in Summary [95%CI]	Follow-up Time
<p>Author (Year): Paunio 1991</p> <p>Study Period: 1982-1986</p> <p>Design Suitability (Design): Moderate (Interrupted Time Series)</p> <p>Quality of Execution (# of Limitations): Fair (4)</p> <p>Outcome Measure: MMR</p>	<p>Location: Finland: nation-wide</p> <p>Intervention: Mass media campaign (1 week period of television and radio programs and information sent to local press)</p> <p>Note: Mass media campaign was followed by provider reminder and client reminder campaigns (not examined here)</p> <p>Comparison: Before-after</p>	<p>Sample: Children aged birth through 11 years in Finland N=138,861 at baseline with 121,324 (87.4%) already vaccinated</p> <p>Interventions implemented in the third year of a national vaccination program (further confounded by a polio outbreak and vaccination effort in 1985)</p>	<p>Number of children who received MMR vaccination for the first time</p> <p>14-18 month olds</p> <p>6 year olds</p>	<p>(89.3%)</p> <p>(83.9%)</p>	<p>Not reported (described as no effect)</p> <p>Not reported (described as increasing vaccination s $p < 0.05$ in media period)</p>	<p>Narrative summary</p> <p>Timing of change in numbers of 6 year old children vaccinated with the onset of the mass media campaign (figures 1, 2, and 3)</p>	<p>Interv period was 1 week</p>

Study	Location and Intervention	Population and Sample	Effect Measure	Reported Baseline	Reported Effect	Value use in Summary [95%CI]	Follow-up Time
<p>Author (Year): Wallace 2008</p> <p>Study Period: 2005-2006</p> <p>Design Suitability (Design): Moderate (Retrospective cohort)</p> <p>Quality of Execution (# of Limitations): Fair (4)</p> <p>Outcome Measure: Pneumococcal vaccine (PPV)</p>	<p>Location: Australia: New South Wales</p> <p>Intervention: Mass media campaign (television ads over 7 week period May-July 2006) + reduced out of pocket costs (free)</p> <p>Comparison: Reduced out of pocket costs (free)</p> <p>Note: Study during the second year of a two year campaign in Australia</p>	<p>Setting: North Coast area of New South Wales</p> <p>Campaign targeted North Coast residents over 65 years of age and (a second ad) Aboriginal and Torres Strait Islanders over 50 years of age.</p> <p>Comparison area: Retrospective comparisons within target region and with the non-targeted regions of New South Wales</p>	<p>Change in proportion of all PPV dispatched to immunization providers in study regions</p> <p><u>Note:</u> vaccines ordered (proxy) for vaccinations administered to clients who were not immunized in first year of the national campaign</p>	<p>June-Sept <u>2005</u> Comparison -28%</p>	<p>June-Sept <u>2006</u> Interv +33%</p>	<p>Narrative summary Timing of change in PPV orders coincided with media campaign (figure 1)</p>	<p>1 year</p>

Study	Location and Intervention	Population and Sample	Effect Measure	Reported Baseline	Reported Effect	Value use in Summary [95%CI]	Follow-up Time
<p>Author (Year): Yoo 2010</p> <p>Study Period: 1999-2001</p> <p>Design Suitability (Design): Least (Cross-sectional)</p> <p>Quality of Execution (# of Limitations): Fair (2)</p> <p>Outcome Measure: Influenza – older adults</p>	<p>Location: USA; Nationwide</p> <p>Intervention: Mass media coverage on flu-related topics using various media channels Included:</p> <ul style="list-style-type: none"> • a wire service news agency • nationwide newspaper • four television networks 	<p>Study Population:</p> <ul style="list-style-type: none"> • nationally representative sample • community dwelling Medicare elderly population • aged 65 or older • continuously enrolled in Medicare Part B from September 1 to December 31, including those who were alive on September 1 but died between Sept 2 and Dec 31 <p>Sample Size: N= 7208, 7071, 7136 for 1999-2001 respectively</p>	<p>Annual receipt of influenza vaccine</p>			<p>A positive association was found between flu-related media reports and influenza vaccination rates in the weeks following the reports in a nationally representative population of elderly individuals</p>	<p>N/A</p>