

Vaccination Programs: Provider Assessment and Feedback

Summary Evidence Table - Updated Evidence (search period: 1997-2012)

Study	Location and Intervention	Study Population and Sample	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Follow-up time
<p>Author (Year): Bordley (2001), Margolis (2001)</p> <p>Study Period: 1994-1997</p> <p>Design Suitability (Design): Least (Before-after)</p> <p>Outcome Measure: Children up-to-date on immunizations</p>	<p>Location: USA, Durham, NC</p> <p>Intervention: Quality improvement effort initiated by an assessment and feedback intervention</p>	<p>Study Population: Practices in Durham, NC that enrolled at least 5 newborns each month</p> <p>N=8 practices (all agreed to participate)</p> <p>Sample: Audits of records of children age 24-36 months</p> <p>N charts bsline: 339 N f/u 3: 300 N f/u 2: 285 N f/u 1: 289</p>	Proportion of children up-to-date on immunizations at 24 months of age based on the follow-up sample #3	67%	79%	+12 pct pts [+5.2, +18.8] Relative change +18%	24-30 months
<p>Author (Year): Borgiel (1999)</p> <p>Study Period: 1994-1996</p> <p>Design Suitability (Design): Greatest (RCT)</p> <p>Outcome Measure: Children: Up to date (Y/N); Adult: offered influenza (Y/N)</p>	<p>Location: Ontario, Canada</p> <p>Intervention: Practice Assessment Report (PAR) +Continuing Medical Education Plan (CMEP) with f/u visit by MD mentor</p> <p>Comparison: Standard PAR</p>	<p>Study Population: 56 randomly selected physicians of 104 eligible (54%) 2395 patients of 7957 eligible (30%)</p> <p>Sample: Intervention 29 Control 27</p>	Current immunization for children (Y/N), and older patients offerend influenza vaccine (Y/N) as two measure of Preventive Care services overall score (>6 measures)	NR	<p>Childhood <u>coverage</u> I:95.8% C:98.3%</p> <p>Adults offered <u>influenza</u> I: 83.5% C:88.5%</p>	Change in mean score (Preventive care global score) I: +1.0 pct pt C:-0.4 pct pt	12 months

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<p>Author (Year): Brousseau (2010)</p> <p>Study Period: 2007-2009</p> <p>Design Suitability (Design): Least (Before-after)</p> <p>Outcome Measure: Vaccination delays; Childhood series</p>	<p>Location: Quebec City, Canada</p> <p>Intervention: Provider assessment and feedback + IIS</p>	<p>Study Population: Ten clinics representing more than 2500 vaccinated children</p> <p>Sample: N=106 physicians, nurses and secretaries participated in the intervention</p>	<p>Vaccination delay: Proportion of vaccines administered without delay at 2 months</p> <p>1st DTap-Polio-Hib (1 month) 1st Pneumococcal</p> <p>Vaccination delay: Proportion of vaccines administered without delay at 12 months</p> <p>Meningococcal (1 month) 1st MMR</p>	<p>93.6% 94%</p> <p>77% 72.7%</p>	<p>93.6% 93.8%</p> <p>77% 74.9%</p>	<p>0 pct pts -0.2 pct pts Relative chg: -.21%</p> <p>0 pct pts +2.2 pct pts Relative chg: +3%</p>	1 year															
<p>Author (Year): Fairbrother (1999)</p> <p>Study Period: 1995-1996</p> <p>Design Suitability (Design): Greatest (Group randomized trial)</p> <p>Outcome Measure: Up-to-date (children)</p>	<p>Location: USA, New York City, NY</p> <p>Intervention arms (3): (1) Assessment and feedback with bonus incentive (2) Assessment and feedback with fee-for-service incentive (3) Assessment and feedback only</p> <p>Comparison: Assessment and feedback for lead and TB screening only</p>	<p>Study Population: Participating pediatric and family medicine providers in nine NYC neighborhoods</p> <p>Sample: N eligible = 176 (invited 83) N participated = 63 N analysis =60</p> <p>Random assignment of providers to condition (15 per arm) Independent samples of pediatric clients of study providers (estimated)</p> <table border="1"> <thead> <tr> <th>Group</th> <th>Nbaseline</th> <th>N 8m</th> </tr> </thead> <tbody> <tr> <td>I1</td> <td>(750)</td> <td>(750)</td> </tr> <tr> <td>I2</td> <td>(750)</td> <td>(750)</td> </tr> <tr> <td>I3</td> <td>(750)</td> <td>(750)</td> </tr> <tr> <td>Comp</td> <td>(750)</td> <td>(750)</td> </tr> </tbody> </table>	Group	Nbaseline	N 8m	I1	(750)	(750)	I2	(750)	(750)	I3	(750)	(750)	Comp	(750)	(750)	<p>Proportion of children with up-to-date vaccination status on chart audit</p> <p>Arm 1: Provider assessment and feedback with bonus incentive</p> <p>Arm 2: Provider assessment and feedback with fee-for-service incentive</p> <p>Arm 3 Provider assessment and feedback only</p>	<p>I 29.1% C 34.6%</p> <p>I 46.2% C 34.6%</p> <p>I 31.4% C 34.6%</p>	<p>I 54.4% C 40.7%</p> <p>I 50.5% C 40.7%</p> <p>I 44.0% C 40.7%</p>	<p>Net difference ($\Delta I - \Delta C$)</p> <p>+19.2 pct pts [+14.2, +24.2] p<0.01 relative chg +69%</p> <p>-1.8 pct pts [-6.8, +3.2] relative -8.3%</p> <p>+6.5 pct pts [+1.5, +11.5] relative +22.5%</p>	<p>8 months</p> <p>8 months</p> <p>8 months</p>
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<p>Author (Year): Furey (2001)</p> <p>Study Period: 1998-2000</p> <p>Design Suitability (Design): Least (Before-after)</p> <p>Outcome Measure: Influenza vaccination (adult)</p>	<p>Location: UK, 1 district</p> <p>Before: Influenza coverage assessment and feedback to all practices in 1 district.</p> <p>After: Coverage level assessed again in following year</p>	<p>Study Population: 123 practices in district were surveyed on immunization coverage. Feedback on influenza coverage levels given to all practices as well as comparative performance across the district</p>	<p>Proportion of patients aged >75 years who received flu vaccine in 1998-1999 flu season</p> <p>Comparison: proportion of patients aged >65 years who received flu vaccine in 1999-2000 flu season</p>	<p>Overall baseline of >75 yo who received influenza: 50% Range (7%-97%)</p>	<p>Overall % of >65 yo who received influenza: 62%</p>	<p>Net difference ($\Delta I - \Delta C$) +12 pct pts</p> <p>Relative chg +24%</p>	<p>2 years</p>						
<p>Author (Year): Hambidge (2004)</p> <p>Study Period: 1998-1999</p> <p>Design Suitability (Design): Greatest (Group Randomized Trial)</p> <p>Outcome Measure: Up-to-date with childhood vaccination series</p>	<p>Location: Denver, Colorado</p> <p>Intervention: Client reminder/recall + Provider assessment/feedback + Provider education + Client education + Expanding access + Provider incentives + Provider reminder + Immunization Information Systems</p> <p>Comparison: Provider assessment/feedback + Immunization information systems</p>	<p>Setting: Health clinics in the Denver Health System</p> <p>Study Population:</p> <ul style="list-style-type: none"> • Children • Primarily Latino • > 88% w/Medicaid/Medicare <p>Sample:</p> <table style="margin-left: 20px;"> <tr> <td></td> <td style="text-align: center;"><u>N</u></td> </tr> <tr> <td>Interv</td> <td style="text-align: center;">1030</td> </tr> <tr> <td>Compr</td> <td style="text-align: center;">1160</td> </tr> </table>		<u>N</u>	Interv	1030	Compr	1160	<p>Proportion up-to-date at 12 months</p>	<p>71%</p>	<p>76%</p>	<p>+5 pct pts [95% CI: 1, 9]</p>	<p>1 year</p>
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Study	Location and Intervention	Study Population and Sample	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Follow-up time															
<p>Author (Year): Hillman (1999)</p> <p>Study Period: 1993-1995</p> <p>Design Suitability (Design): Greatest (Group randomized trial)</p> <p>Outcome Measure: Mean immunization compliance score (%)</p>	<p>Location: USA, Philadelphia PA</p> <p>Intervention arms (2):</p> <p>(1) Assessment and feedback plus bonus incentive</p> <p>(2) Assessment and feedback alone</p> <p>Comparison: Assessment without feedback or incentive</p>	<p>Study Population: Primary care physician practices serving pediatric members in a managed care plan</p> <p>Sample: Random assignment of practices to providers to one of three conditions</p> <table border="1"> <thead> <tr> <th>Group</th> <th>Nbaseline</th> <th>N 18m</th> </tr> </thead> <tbody> <tr> <td>Overall</td> <td>53</td> <td>49</td> </tr> <tr> <td>PAF+ I</td> <td>19</td> <td>19</td> </tr> <tr> <td>PAF</td> <td>17</td> <td>15</td> </tr> <tr> <td>Control</td> <td>17</td> <td>15</td> </tr> </tbody> </table>	Group	Nbaseline	N 18m	Overall	53	49	PAF+ I	19	19	PAF	17	15	Control	17	15	<p>Total compliance score based on chart audits assessed at 6 month intervals</p> <p>Arm 1: Provider assessment and feedback with bonus incentive</p> <p>Arm2: Provider assessment and feedback only</p>	<p>I: 60.2% C: 69.1%</p> <p>I: 57.4% C: 69.1%</p>	<p>I: 76.9% C: 80.8%</p> <p>I: 80.0% C: 80.8%</p>	<p>Net difference ($\Delta I - \Delta C$)</p> <p>+ 5 pct pts [-22.5, +32.5] Relative: +10.8%</p> <p>+10.9 pct pts [-85.3, -36.9] Relative: +22.5%</p>	<p>18 months</p> <p>18 months</p>
Group	Nbaseline	N 18m																				
Overall	53	49																				
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<p>Author (Year): Humair (2002)</p> <p>Study Period: 1995-1996, Oct-Dec</p> <p>Design Suitability (Design): Least (Before- after)</p> <p>Outcome Measure: Influenza vaccination levels (adult)</p>	<p>Location: Geneva, Switzerland</p> <p>Intervention occurred from Oct 1- Dec 31 1996, and included:</p> <p>Patient-based: leaflets/posters on flu handed out to patients</p> <p>Care delivery-based: Walk-in clinic ("low cost")</p> <p>Provider-based: training, assessment and feedback (PAF)</p>	<p>Study Population: University based public primary care clinic</p> <p>Sample: Control (historical): 318 patients >64 years who visited clinic in 1995</p> <p>Intervention: 346 patients >64 years who visited clinic in 1996</p> <p>Note: 144 pts. Visited in both phases; 376 visited in one phase only. Analysis conducted separately</p>	<p>Influenza vaccination coverage levels among patients in 1995 compared to 1996 (pre and post intervention)</p>	<p>Pre-intervention: 21.7%</p> <p><u>Both phases (n=144)</u> Pre: 29.2%</p> <p>One phase (n=174) Pre: 15.5%</p>	<p>Post-Intervention: 51.7%</p> <p><u>Both phases</u> Post: 69.4%</p> <p>One phase (n=202) Post: 39.1%</p>	<p>+30 pct pts [CI: 23, 37] Relative +138%</p> <p><u>Matched analysis</u> +40.2%; RR=2.4 (1.9-3.0)</p> <p><u>Pts. Visiting in 1 phase</u> +23.6% RR=2.8 (1.8-4.4) 65-75: RR=5 (2.5-10)</p>	<p>12 months</p>															

Study	Location and Intervention	Study Population and Sample	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Follow-up time									
<p>Author (Year): Kiefe (2001)</p> <p>Study Period: 1996-1998</p> <p>Design Suitability (Design): Greatest (RCT)</p> <p>Outcome Measure: Adult influenza vaccination rates</p>	<p>Location: USA – Alabama, Iowa and Maryland</p> <p>Intervention: PAF+ achievable benchmark feedback (the average performance for the top 10% of physicians being assessed for each indicator)</p> <p>Comparison: Standard PAF</p>	<p>Sample: N=561 eligible physicians N participated=97 N completed=70</p> <p>Intervention: n=35 physicians Control : n=35 physicians</p> <p>Study Population: Patients of study physicians (average of 20 patients per physician included in chart review)</p> <table border="1" data-bbox="596 678 947 764"> <thead> <tr> <th>Group</th> <th>Baseline</th> <th>24m f/u</th> </tr> </thead> <tbody> <tr> <td>Int</td> <td>965</td> <td>678</td> </tr> <tr> <td>Control</td> <td>966</td> <td>682</td> </tr> </tbody> </table>	Group	Baseline	24m f/u	Int	965	678	Control	966	682	<p>Change in proportion of patients receiving influenza (+ 4 other outcomes) from baseline to follow-up assessment in control and intervention groups</p>	<p>Control: 40% influenza coverage</p> <p>Intervention: 40% influenza coverage</p>	<p>Control: 46% influenza coverage</p> <p>Intervention: 58% influenza coverage</p>	<p>Net difference ($\Delta I - \Delta C$)</p> <p>+12 pct pts [CI: 6.7, 17.3] Relative: +30</p> <p>Physicians who graduated from medical school after 1970 were more likely to order influenza vaccination- (OR: 2.05 (1.26-3.35); and internists were less likely than family practitioners to order influenza (OR: 0.6 (0.42-0.85))</p> <p>In general: Significant change in influenza coverage from baseline to follow-up among control (p=.02) and intervention (p<.001) groups</p>	<p>24 months</p>
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<p>Author (Year): Massoudi (1999)</p> <p>Study Period: 1994-1997</p> <p>Design Suitability (Design): Least (Before-after)</p> <p>Outcome Measure: Up-to-date (children)</p>	<p>Location: USA, State of Maine</p> <p>Intervention: Assessment and feedback conducted once for every provider site in the period (1994-1996; follow-up 1997) + Provider education in letter or site visit + Incentives (recognition)</p>	<p>Study Population: All private practice provider sites receiving vaccines through the Maine Immunization Program N = 231 sites</p> <p>Follow-up assessments were conducted on 63 (27%) of 231 sites (larger practices)</p> <p>Analysis focused on change in these 63 study sites based on chart audits (median 21, mean 39 at each site)</p>	<p>Median site assessment of the proportion of clients with up-to-date vaccination coverage at 24 month of ages on chart audit</p>	<p>78%</p>	<p>87% p<0.001</p>	<p>+9 pct points [-4.2, +22.2] relative chg +11%</p>	<p>1 year</p>
<p>Author (Year): Melinkovich (2007)</p> <p>Study Period: 1995-2006</p> <p>Design Suitability (Design): Least (Before-after)</p> <p>Outcome Measure: Vaccination rates: 3-2-2-2 series (1 yr olds) 4-3-1-3-3 series (2 yr olds)</p>	<p>Location: USA, Denver, CO</p> <p>Intervention: Registry + Standing Orders + Provider Assessment and Feedback + Client Reminder + Provider Education</p> <p>Comparison: Before-After</p>	<p>Study Population: Immunization initiative that was designed to increase childhood immunization rates in the high-risk pediatric population served through the DCHS safety-net delivery system Study Clinic: N=9 DCHS sites</p> <p>Eligible patients Children:</p> <ul style="list-style-type: none"> • younger than 3 yrs of ages • made a medical visit to one of the nine DCHS sites serving infants and younger children 	<p>Up-to-Date vaccination rates: 3-2-2-2 series (1 yr olds)</p> <p>4-3-1-3-3 series (2 yr olds)</p>	<p>66%</p> <p>38%</p>	<p>2006</p> <p>92%</p> <p>85%</p>	<p>+26 pct pt Δ 95% CI= not calculated Relative (+39%)</p> <p>+47 pct pt Δ 95% CI= not calculated Relative (+124%)</p>	<p>11 years</p>

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<p>Author (Year): Nace (2007)</p> <p>Study Period: 1996-2006</p> <p>Design Suitability (Design): Least (Before-after)</p> <p>Outcome Measure: Staff immunization rate, adults (SIR)</p>	<p>Location: USA, Pittsburg PA</p> <p>Intervention: System changes (includes PAF) + education + provider reminders</p>	<p>Study Population: All employees of a community based healthcare facility (included part-time and dietary staff)</p> <p>Sample: <u>1996-1997</u> <u>1997-1998</u> 211 235</p> <p>*number of staff changed between baseline and follow-up</p>	<p>Staff immunization rate defined as number of facility employees receiving flu shot divided by the total number of facility employees, multiplied by 100</p>	<p>54.0%</p>	<p>55.3%</p>	<p>+1.3 pct pts [-8.0, +10.5] Relative: +2.4%</p>	<p>12 months</p>
<p>Author (Year): Page (2002)</p> <p>Study Period: 1997-1999</p> <p>Design Suitability (Design): Moderate (Retrospective cohort comparison)</p> <p>Outcome Measure: Up-to-date (children)</p>	<p>Location: USA, Northeast Florida</p> <p>Intervention: Site self-reported semi-annual audits of vaccination coverage in the year prior</p> <p>Comparison: sites not reporting semi-annual audits in the year prior</p>	<p>Study Population: Recruited, selected family practice and pediatric clinics in NE Florida participating in Vaccine for Children Program, and enrolled in area managed care plans N=42 sites (10 family practice and 32 pediatric sites)</p> <p>Sample: Random sample of chart audits (2 yr olds) N=2,552 records audited No audit sites-audits: 680 Audit sites-audits: 1872</p>	<p>Proportion of audits with up-to-date immunization status</p> <p>Multivariate logistic regression analysis on audit and immunization completion</p>	<p>No Audit 62%</p>	<p>Audit 77%</p>	<p>+15 pct pts [+10.9, +19.1] relative difference +24.2%</p> <p>OR = 2.0 [1.65, 2.42]</p>	<p>NA</p>

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<p>Author (Year): Quinley (2004)</p> <p>Study Period: 1999-Dec. 2000</p> <p>Design Suitability (Design): Greatest (RCT)</p> <p>Outcome Measure: Adult PPV rates</p>	<p>Location: New York state</p> <p>Intervention arms (2): PAF+f/u phone call (1) African-American serving group (2) high-volume provider group)</p> <p>Comparison: PAF</p>	<p>Study population: Physicians identified as high priority for interventions to improve cumulative PPV vaccination rates.</p> <p>Baseline: n=1,118 physicians selected, 57 excluded. Final sample: 1061</p> <p>Random assignment of providers to condition, except all AA serving practices in Brooklyn assigned to AA intervention arm</p> <table border="0" data-bbox="594 792 953 966"> <thead> <tr> <th><u>Group</u></th> <th><u>Int.</u></th> <th><u>Control</u></th> </tr> </thead> <tbody> <tr> <td>AA</td> <td>n=118</td> <td>n=100</td> </tr> <tr> <td>NYC- AA</td> <td>n=10</td> <td></td> </tr> <tr> <td>(AA cont)</td> <td></td> <td></td> </tr> <tr> <td>IHV</td> <td>n=582</td> <td>n=150</td> </tr> </tbody> </table>	<u>Group</u>	<u>Int.</u>	<u>Control</u>	AA	n=118	n=100	NYC- AA	n=10		(AA cont)			IHV	n=582	n=150	<p>Change in PPV rates from 1999 to 2000 Percent of physicians who reached 5% and 10% change in rates. Difference in number of physicians who ordered materials between control and intervention sites Stage of change status in relation to PPV rate, among intervention sites</p>	<p>Baseline- 1999 PPV coverage rate</p> <p>AA practices I (n=118): 19.45% C(n=100): 18.48%</p> <p>High -vol pract: I (n=582): 29.21% C(n=150): 28.42%</p>	<p>Follow up- 2000 PPV coverage rate</p> <p>AA practices I: 23.9% C:20.84%</p> <p>High-vol pract: I: 32.33% C: 30.81%</p>	<p>Change in rate from 1999 to 2000</p> <p>AA practices I: +4.45 (p=0.068) C: +2.36 Net Δ: +2.1 pct points Relative Δ +10.1%</p> <p>High-vol pract: I: +3.12 (p=0.09) C: +2.39 Net Δ: +0.7 pct points Relative Δ +2.3%</p>	<p>1 year</p>
<u>Group</u>	<u>Int.</u>	<u>Control</u>																				
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<p>Author (Year): Rhew (1999)</p> <p>Study Period: Jun-Sep 1997</p> <p>Design Suitability (Design): Greatest (Group randomized trial)</p> <p>Outcome Measure: Total and percent of vaccines given by team (adults)</p>	<p>Location: USA, WLA, CA</p> <p>Intervention: Team A: Nurses' standing orders + comparative feedback + client reminder Team B: Nurses' standing orders + provider reminder + client reminder Team C: Client reminders + provider reminders only</p>	<p>Study Population: Clinic nurses and patients with regularly scheduled appts with a team of primary care providers at Veteran's Ambulatory Care Clinic</p> <p>Random assignment of teams to condition</p> <table border="1" data-bbox="592 560 953 678"> <thead> <tr> <th>Group</th> <th>N patients 12 wks</th> </tr> </thead> <tbody> <tr> <td>Team A</td> <td>1,101</td> </tr> <tr> <td>Team B</td> <td>1,221</td> </tr> <tr> <td>Team C</td> <td>1,180</td> </tr> </tbody> </table>	Group	N patients 12 wks	Team A	1,101	Team B	1,221	Team C	1,180	<p>Total and percent of vaccines given by team (adults)</p> <p>Arm 1: Standing orders+ PAF</p> <p>Arm 2: Standings orders + reminders</p>	<p>NR</p> <p>NR</p>	<p>I: 22% C: 5%</p> <p>I:25% C: 5%</p>	<p>+17 pct pts [+17.3, +22.7]</p> <p>+20 pct pts [+14.3, +19.7]</p>	<p>12 weeks</p>
Group	N patients 12 wks														
Team A	1,101														
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<p>Author (Year): Russell (2001)</p> <p>Study Period: 1998-1999</p> <p>Design Suitability (Design): Least (Before-after)</p> <p>Outcome Measure: Influenza vaccination rates among persons aged 65 years or older</p>	<p>Location: Canada, Alberta</p> <p>Intervention: Provider assessment and feedback (regional and provider-type data) + Enhanced access in healthcare settings + Community-wide education</p>	<p>Study Population: Vaccination providers in the Alberta Regional Health Authority Public health nurses: N=NR Physicians: N=NR</p> <p>Sample: Persons aged 65 years or older in Alberta RHA N=NR Coverage estimates based on registry totals and census data</p>	<p>Estimated influenza vaccination rates for persons age 65 years or older</p>	<p>1998 (pre) 59.9%</p>	<p>1999 (post) 65.6%</p>	<p>+5.7 pct pts relative: +9.5%</p>	<p>1 year</p>								

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<p>Author (Year): Rust (1999)</p> <p>Study Period: 1997-1998</p> <p>Design Suitability (Design): Greatest (RCT)</p>	<p>Location: USA</p> <p>Intervention: Provider education + Chart audits with feedback reports 2 months after first audit and monthly thereafter for a total of 12 feedback reports</p> <p>Comparison: Education only</p>	<p>Providers: PL1 and PL2 residents in a continuity clinic</p> <p>Patients: pediatric patients > 2 yrs old who were visiting the clinic for a second or subsequent visit</p> <p>Random assignment of providers to condition</p> <p>I: PL1 n= 7 PL2 n= 9 C: PL1 n= 7 PL2 n=9</p> <p>Chart reviews: I: 104 C: 168</p>	<p>Up to date coverage in pediatric patients of study providers obtained via chart review and local immunization registry</p>	<p>NR</p>	<p>I: 71.4% C: 68.5%</p>	<p>+2.9 pct pts [-8.3, +14.1]</p>	<p>12 months</p>
<p>Author (Year): Sabnis (2003)</p> <p>Study Period: 1995-1996</p> <p>Design Suitability (Design): Least (Before-after)</p> <p>Outcome Measure: Percent missed opportunities</p>	<p>Location: USA-urban community health center (Milwaukee, WI)</p> <p>Intervention: multi-component assessment and feedback strategies</p>	<p>Study Population: 1 community health center in urban setting</p> <p>Sample: Pre-intervention: 352 children <36 months old in pre-intervention assessment with consecutive clinic encounters from Jan 1 to March 1, 1995</p> <p>Post-intervention: 344 children <36 months old in post-intervention assessment with consecutive clinic encounters from Sep 1 to Dec 31, 1996</p>	<p>Change in percent missed opportunities before and after feedback intervention.</p>	<p>49% MOs (173/352)</p>	<p>13% (45/344)</p>	<p>+36 pct pts (p value < .001)</p>	<p>24 months</p>

Study	Location and Intervention	Study Population and Sample	Effect measure	Reported baseline	Reported effect	Value used in summary [95%CI]	Follow-up time
<p>Author (Year): Taylor (2002)</p> <p>Study Period: 1998-2000</p> <p>Design Suitability (Design): Moderate (Retrospective cohort comparison)</p>	<p>Location: USA, Puerto Rico, and Quebec, Canada</p> <p>Intervention: Site self-reported conduct of an immunization audit</p> <p>Comparison: Practices that reported an audit in the last year with practices that did not report an audit in the last year</p>	<p>Study Population: Recruited pediatric practices within PROS or NMA networks</p> <p>Sample: N =177 recruited (care provision to 80+ children) N =112 practices at analysis</p> <p>Consecutive sample of clients age 8m-35m presenting to study site in the survey period N site= NR (up to 120 patients per site)</p>	<p>Median practice immunization rate (PIR) for clients at 19 months of age</p> <p>Median PIR for clients at 8 months of age</p> <p>Regression analyses examined the association between PIR and conduct of an immunization audit at the study site in the preceding 12 months</p>	<p>Median overall 71%</p> <p>Median overall 85%</p>	<p>NR</p> <p>NR</p>	<p>-0.8 pct pts (est) [-8.8, 7.2] p=0.8 relative chg -1.1%</p> <p>-3.4 pct pts (est) [-9.8, 3.0] p=0.3 relative chg -4%</p>	<p>NA</p>