

# Obesity Prevention and Control: Multicomponent Provider Interventions

## Summary Evidence Table

### Adult Populations

Study	Intervention and Comparison	Study Population	Effect measure	Reported Baseline and Follow-Up	Reported effect	Follow-up time																									
<p><b>Author (year):</b> Frijling et al. (2002)</p> <p><b>Study Period:</b> 1996-1999</p> <p><b>Study Design:</b> Group RCT</p> <p><b>Design Suitability:</b> Greatest</p> <p><b>Quality of Execution:</b> Fair</p>	<p><b>Location:</b> Netherlands</p> <p><b>Components:</b> General practitioners received feedback reports and support from a facilitator to improve their clinical decision making</p> <p><b>Control:</b> Usual care</p>	<p>124 practices and 185 general practitioners</p>	<p>Blood pressure in last 12 months</p> <p>Scheduling Follow-up visit</p> <p>Discussion of body weight control</p>		<p><u>Odds Ratio</u> <u>95% CI</u></p> <p>1.34 0.70-2.54</p> <p>1.04 0.75-1.45</p> <p>1.01 0.70-1.45</p>	21 months																									
<p><b>Author (year):</b> McDermott et al. (2001)</p> <p><b>Study Period:</b> not reported</p> <p><b>Study Design:</b> Group RCT</p> <p><b>Design Suitability:</b> Greatest</p> <p><b>Quality of Execution:</b> Fair</p>	<p><b>Location:</b> Australia Torres Strait Island</p> <p><b>Components:</b> All sites received baseline auditing of clinical records and the new diabetes outreach service. The intervention sites used a recall card system, followed up by regular phone calls &amp; newsletters.</p> <p><b>Comparison:</b> Usual care</p>	<p>21 healthcare sites: 8 intervention 13 control</p> <table border="1"> <thead> <tr> <th>Group</th> <th>N<sub>0</sub></th> <th>N<sub>1</sub></th> </tr> </thead> <tbody> <tr> <td>Control</td> <td>305</td> <td>396</td> </tr> <tr> <td>Interv</td> <td>250</td> <td>282</td> </tr> </tbody> </table>	Group	N <sub>0</sub>	N <sub>1</sub>	Control	305	396	Interv	250	282	<p>BP check past 6 months</p> <p>Control Intervention</p> <p>Glycosylated Hemoglobin past 6 months</p> <p>Control Intervention</p> <p>Lipids check past 12 months</p> <p>Control Intervention</p> <p>Weight check past 12 months</p> <p>Control Intervention</p>	<p><u>Baseline</u>   <u>12m</u></p> <table border="1"> <tbody> <tr> <td>64</td> <td>57</td> </tr> <tr> <td>76</td> <td>65</td> </tr> <tr> <td>60</td> <td>62</td> </tr> <tr> <td>70</td> <td>73</td> </tr> <tr> <td>54</td> <td>70</td> </tr> <tr> <td>57</td> <td>88</td> </tr> <tr> <td>56</td> <td>63</td> </tr> <tr> <td>54</td> <td>74</td> </tr> </tbody> </table>	64	57	76	65	60	62	70	73	54	70	57	88	56	63	54	74	<p>-7 -11</p> <p>2 3</p> <p>16 31</p> <p>7 20</p>	12 months
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<p><b>Author (year):</b> Simkin-Silverman et al. (1997)</p> <p><b>Study Period:</b> not reported</p> <p><b>Study Design:</b> RCT</p> <p><b>Design Suitability:</b> Greatest</p> <p><b>Quality of Execution:</b> Fair</p>	<p><b>Location:</b> Allegheny, PA</p> <p><b>Components:</b> Physicians received a 2-hr training session on obesity counseling skills. The training was a 5-step patient centered model. Staff was also trained to support physician delivered counseling.</p> <p><b>Comparison:</b> Usual care</p>	<p>11 physicians</p> <table border="1" data-bbox="730 678 982 768"> <thead> <tr> <th>Group</th> <th>N<sub>0</sub></th> <th>N<sub>1</sub></th> </tr> </thead> <tbody> <tr> <td>Control</td> <td>5</td> <td>5</td> </tr> <tr> <td>Counselling</td> <td>6</td> <td>6</td> </tr> </tbody> </table>	Group	N <sub>0</sub>	N <sub>1</sub>	Control	5	5	Counselling	6	6	<p>Advised decreasing calories</p> <p>Control Counselling</p> <p>Advised increasing exercise</p> <p>Control Counselling</p> <p>Advised lowering fat intake</p> <p>Control Counselling</p> <p>Advised weight loss</p> <p>Control Counselling</p> <p>Discussed benefits of exercise</p> <p>Control Counselling</p> <p>Discussed benefits of weight loss</p> <p>Control Counselling</p>	<table border="1" data-bbox="1327 618 1614 1438"> <thead> <tr> <th></th> <th>Baseline</th> <th>1m</th> </tr> </thead> <tbody> <tr> <td>Advised decreasing calories</td> <td>16</td> <td>5</td> </tr> <tr> <td>Control</td> <td>8</td> <td>75</td> </tr> <tr> <td>Advised increasing exercise</td> <td>26</td> <td>16</td> </tr> <tr> <td>Control</td> <td>30</td> <td>86</td> </tr> <tr> <td>Advised lowering fat intake</td> <td>21</td> <td>5</td> </tr> <tr> <td>Control</td> <td>13</td> <td>77</td> </tr> <tr> <td>Advised weight loss</td> <td>26</td> <td>21</td> </tr> <tr> <td>Control</td> <td>30</td> <td>88</td> </tr> <tr> <td>Discussed benefits of exercise</td> <td>16</td> <td>26</td> </tr> <tr> <td>Control</td> <td>32</td> <td>89</td> </tr> <tr> <td>Discussed benefits of weight loss</td> <td>21</td> <td>16</td> </tr> <tr> <td>Control</td> <td>28</td> <td>82</td> </tr> </tbody> </table>		Baseline	1m	Advised decreasing calories	16	5	Control	8	75	Advised increasing exercise	26	16	Control	30	86	Advised lowering fat intake	21	5	Control	13	77	Advised weight loss	26	21	Control	30	88	Discussed benefits of exercise	16	26	Control	32	89	Discussed benefits of weight loss	21	16	Control	28	82	<p>-11 67</p> <p>-10 56</p> <p>-16 64</p> <p>-5 58</p> <p>10 57</p> <p>-5 54</p>	<p>1 month</p>
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<b>Author (year):</b> Thom et al. (2006)  <b>Study Period:</b> not reported	<b>Location:</b> San Francisco, CA  <b>Components:</b> Diabetes and hypertension patients	53 physicians and 429 patients  Feedback Only group = 30 physicians	Hemoglobin A1C Feedback only Training & Feedback Satisfaction score Feedback only Training & Feedback	<u>Baseline</u> 0.07 0.02  -0.21 -0.73		None																																										

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<p><b>Study Design:</b> Before-After (use only training and feedback)</p> <p><b>Design Suitability:</b> Least</p> <p><b>Quality of Execution:</b> Fair</p>	<p>completed a survey to measure physicians' culturally competent behaviors. Primary care physicians received cultural competency training for 6 months and feedback from patients' surveys.</p> <p><b>Comparison:</b> Usual care</p>	<p>Training &amp; Feedback group = 23 physicians</p>	<p>Systolic BP (mmHg)</p> <p>Feedback only Training &amp; Feedback</p> <p>Trust score</p> <p>Feedback only Training &amp; Feedback</p> <p>Weight (lbs)</p> <p>Feedback only Training &amp; Feedback</p>	<p>0.07 1.69</p> <p>2.54 1.93</p> <p>-0.66 -2.46</p>																																																														
<p><b>Author (year):</b> Vinicor et al. (1987)</p> <p><b>Study Period:</b> not reported</p> <p><b>Study Design:</b> Group RCT (use Physician only and control)</p> <p><b>Design Suitability:</b> Greatest</p> <p><b>Quality of Execution:</b> Fair</p>	<p><b>Location:</b> Indianapolis, IN</p> <p><b>Components:</b> Patient Education: patients receive education focused on target behaviors essential for self-management of diabetes Physician Education: physicians receive intensive education program Patient and Physician Education: Patients and physicians receive Diabetes Research and Training Center - initiated training programs</p> <p><b>Comparison:</b> Usual care (diabetes education routinely available in the clinic)</p>	<p>3-4 resident teams and 532 patients randomized from 1 clinic</p> <table border="1"> <thead> <tr> <th>Group</th> <th>N<sub>0</sub></th> <th>N<sub>1</sub></th> </tr> </thead> <tbody> <tr> <td>Contr</td> <td>129</td> <td>68</td> </tr> <tr> <td>Phy</td> <td>130</td> <td>62</td> </tr> <tr> <td>Pat&amp;Phy</td> <td>133</td> <td>133</td> </tr> </tbody> </table>	Group	N <sub>0</sub>	N <sub>1</sub>	Contr	129	68	Phy	130	62	Pat&Phy	133	133	<p>Diastolic Blood Pressure (mmHg)</p> <p>Control Physician Only Patient &amp; Physician</p> <p>Systolic Blood Pressure (mmHg)</p> <p>Control Physician Only Patient &amp; Physician</p> <p>Fasting Glucose (mg/dl)</p> <p>Control Physician Only Patient &amp; Physician</p> <p>Glycosylated Hemoglobin (Hb A1C)</p> <p>Control Physician Only Patient &amp; Physician</p> <p>Weight (lbs, direct measure)</p> <p>Control Physician Only Patient &amp; Physician</p>	<table border="1"> <thead> <tr> <th></th> <th>Baseline</th> <th>26m</th> </tr> </thead> <tbody> <tr> <td>Control</td> <td>81.4</td> <td>85.2</td> </tr> <tr> <td>Physician Only</td> <td>83.1</td> <td>83.4</td> </tr> <tr> <td>Patient &amp; Physician</td> <td>81.8</td> <td>81.3</td> </tr> <tr> <td>Control</td> <td>137.2</td> <td>144.9</td> </tr> <tr> <td>Physician Only</td> <td>142.5</td> <td>146.4</td> </tr> <tr> <td>Patient &amp; Physician</td> <td>140.4</td> <td>145.0</td> </tr> <tr> <td>Control</td> <td>201.1</td> <td>208.7</td> </tr> <tr> <td>Physician Only</td> <td>209.6</td> <td>196.5</td> </tr> <tr> <td>Patient &amp; Physician</td> <td>229.2</td> <td>190.2</td> </tr> <tr> <td>Control</td> <td>10.19</td> <td>10.74</td> </tr> <tr> <td>Physician Only</td> <td>10.51</td> <td>10.64</td> </tr> <tr> <td>Patient &amp; Physician</td> <td>11.34</td> <td>10.42</td> </tr> <tr> <td>Control</td> <td>185.3</td> <td>186.4</td> </tr> <tr> <td>Physician Only</td> <td>188.8</td> <td>185.4</td> </tr> <tr> <td>Patient &amp; Physician</td> <td>193.8</td> <td>189.1</td> </tr> </tbody> </table>		Baseline	26m	Control	81.4	85.2	Physician Only	83.1	83.4	Patient & Physician	81.8	81.3	Control	137.2	144.9	Physician Only	142.5	146.4	Patient & Physician	140.4	145.0	Control	201.1	208.7	Physician Only	209.6	196.5	Patient & Physician	229.2	190.2	Control	10.19	10.74	Physician Only	10.51	10.64	Patient & Physician	11.34	10.42	Control	185.3	186.4	Physician Only	188.8	185.4	Patient & Physician	193.8	189.1	<p>3.8 0.3 -0.5</p> <p>7.7 3.9 4.6</p> <p>7.6 -13.1 -39.0</p> <p>0.55 0.13 -0.92</p> <p>1.1 -3.4 -4.7</p>	<p>26 months</p>
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**Pediatric Populations**

Study	Intervention and Comparison	Study Population	Effect measure	Reported Baseline and Follow-Up	Reported effect	Follow-up time									
<p><b>Author (year):</b> Hinchman et al. (2005)</p> <p><b>Study Period:</b> not reported</p> <p><b>Study Design:</b> Before-After</p> <p><b>Design Suitability:</b> Least</p> <p><b>Quality of Execution:</b> Fair</p>	<p><b>Location:</b> Atlanta, Georgia</p> <p><b>Components:</b> Training to improve management of pediatric overweight included 2 interactive seminars. These sessions included an educational component and assessment or counseling tools overview and interactive exercises.</p> <p><b>Control:</b> Received training 3-months after 1<sup>st</sup> group.</p>	<p>Pediatric clinics including nursing staff and clinicians</p> <table border="1"> <thead> <tr> <th>Group</th> <th>N<sub>0</sub></th> <th>N<sub>1</sub></th> </tr> </thead> <tbody> <tr> <td>Grp 1</td> <td>110</td> <td>110</td> </tr> <tr> <td>Grp 2</td> <td>110</td> <td>110</td> </tr> </tbody> </table>	Group	N <sub>0</sub>	N <sub>1</sub>	Grp 1	110	110	Grp 2	110	110	<p>Counseling guide in chart</p> <p>Group 1</p> <p>Group 2</p>	<p><u>Baseline 3 mo</u></p> <p>0 9.3</p> <p>0 6.5</p>	<p><b>Other - Counseling guide in chart</b></p> <p>Group 2 Baseline vs Group 2 3 Month p=0.001</p> <p>Group 1 Baseline vs Group 1 3 Month p=0.001</p> <p><b>Other - Prescription pad in chart</b></p> <p>Group 1 Baseline vs Group 1 3 Month p=0.05</p> <p><b>Other - Self history form in chart</b></p> <p>Group 2 Baseline vs Group 2 3 Month p=0.001</p> <p>Group 1 Baseline vs Group 1 3 Month p=0.001</p> <p>Group 1 3 Month vs Group 2 3 Month p=0.05</p> <p><b>Other - Presence of BMI entry</b></p> <p>Group 2 Baseline vs Group 2 3 Month p=0.001</p> <p>Group 1 Baseline vs Group 1 3 Month p=0.001</p> <p><b>Other - Presence of BMI% entry</b></p> <p>Group 2 Baseline vs Group 2 3 Month p=0.001</p> <p>Group 1 Baseline vs Group 1 3 Month p=0.001</p> <p>Group 1 3 Month vs Group 2 3 Month p=0.001</p>	3 months
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Absolute effect size is calculated unless otherwise noted.

Abbreviations

CI, confidence interval  
BMI, Body Mass Index  
DBP, diastolic blood pressure  
HDL, high density lipoprotein  
kJ, kilojoule  
LDL, low density lipoprotein  
N<sub>0</sub>, sample size at baseline  
N<sub>1</sub>, sample size at time 1  
N<sub>2</sub>, sample size at time 2  
RCT, randomized controlled trial  
RD, registered dietitian  
SBP systolic blood pressure  
TG, triglyceride  
VLCD, very low calorie diet