**Supplementary File 1.** Means and Pearson Correlations for Individual AttitudesUsed to Create Attitude Variables (n=704) a.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Individual Attitude Variables  | Mean(SD)  | Final Attitude Variable | A | B | C | D | E | F | G | H | I | J | K | L | M |
| A. There is adequate time during preventive care visits to counsel on overweight and obesity | 2.5(1.1) | 1b | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| B. Time constraints make treatment, including counseling, difficult | 3.9(1.0)  | 1 | -.564 | 1 |  |  |  |  |  |  |  |  |  |  |  |
| C. Pediatricians can help prevent childhood obesity | 4.2(0.7) | 2 | .113 | -.155 | 1 |  |  |  |  |  |  |  |  |  |  |
| D. There is little that pediatricians can do to treat/manage patients with obesity | 2.0(0.9)  | 2b | -.141 | .208 | -.482 | 1 |  |  |  |  |  |  |  |  |  |
| E. There is a lack of adequate services/resources in my practice area to refer children/families for weight management | 3.2(1.2) | 3 | -.174 | .234 | -.209 | .225 | 1 |  |  |  |  |  |  |  |  |
| F. I am usually paid by insurers for obesity counseling as part of a follow-up visit distinct from regular well child care | 2.6(0.9)  | 4 | .031 | -.099 | .118 | -.137 | -.167 | 1 |  |  |  |  |  |  |  |
| G. I am usually paid by insurers for obesity treatment as part of a follow-up visit distinct from regular well child care | 2.8(0.9)  | 4 | -.007 | -.078 | .115 | -.157 | -.185 | .533 | 1 |  |  |  |  |  |  |
| H. Dietitian services are generally not covered by health insurance | 3.3(0.9) | 5 | -.118 | .126 | -.053 | .103 | .219 | -.167 | -.168 | 1 |  |  |  |  |  |
| I. Weight management programs are generally not covered by health insurance | 3.4(0.9)  | 5 | -.101 | .146 | -.050 | .105 | .212 | -.162 | -.230 | .564 | 1 |  |  |  |  |
| J. Lack of access to healthy food | 3.4(1.2) | 6 | -.194 | .099 | .094 | -.087 | .071 | .077 | .075 | -.001 | -.078 | 1 |  |  |  |
| K. Lack of access to safe places to be active | 3.4(1.2)  | 6 | -.187 | .112 | .053 | -.070 | .108 | .039 | .075 | -.038 | -.057 | .637 | 1 |  |  |
| L. Lack of time to prepare healthy meals | 3.8(0.9\_  | 7 | -.170 | .197 | .032 | -.041 | .067 | -.012 | .028 | .066 | .042 | .298 | .245 | 1 |  |
| M. Lack of time to participate in physical activity | 3.3(1.1) | 7  | -.111 | .109 | .067 | .003 | .044 | -.019 | .030 | .023 | .018 | .286 | .278 | .594 | 1 |

a Respondents indicated how strongly they agreed/disagreed with the statements (A-I) or agreed/disagreed that the statements represent patient/family barriers to addressing overweight and obesity at their practice (J-M), followed by a five- point response scale from 1=strongly disagree to 5=strongly agree. Correlations were based on all available cases

b Indicators were reverse-coded to create final attitude variables.

**Supplementary File 2A.** Additional Confirmatory Factor Analysis Results (n=673): Final Model

ComfGl

ComfMI

.37

.70

.55

EffPrev

.70

.59

.64

1.0

EffMgt

.39

SklMI

.78

.62

.32

.25

.38

.22

.58

.160

.34

.65

.87

.79

.91

CnsBhv

1.0

.83

EvalPsy

.79

EvalMed

EvalBhv

.88

.82

HxOb

DiscOb

**Supplementary File 2B-C.** Additional Confirmatory Factor Analysis Results (n=673).

B. Observed Polychoric Correlations (Top Diagonal) and Model Residuals (Bottom Diagonal)

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | EffPrev  | EffMgt | ComfMI | ComfGls | SklMI | HxOb | DiscOb | EvalBhv | EvalMed  | EvalPsy | CnsBhv |
| EffPrev  |  10 | .800 | .439 | .438 | .421 | .189 | .304 | .285 | .239 | .352 | .416 |
| EffMgt | 0 | 10 | .547 | .553 | .503 | .240 | .344 | .255 | .274 | .367 | .432 |
| ComfMI | .009 | .050 | 10 | .733 | .782 | .237 | .332 | .296 | .294 | .404 | .398 |
| ComfGls | -.012 | .032 | .097 | 10 | .663 | .355 | .427 | .366 | .355 | .421 | .483 |
| SklMI | -.083 | -.081 | .069 | -.083 | 10 | .333 | .503 | .445 | .452 | .564 | .634 |
| HxOb | -.033 | -.016 | -.076 | .027 | -.034 | 10 | .664 | .572 | .534 | .511 | .485 |
| DiscOb | .003 | -.005 | -.093 | -.019 | .004 | .093 | 10 | .801 | .729 | .605 | .740 |
| EvalBhv | .003 | -.072 | -.104 | -.053 | -.024 | .035 | .072 | 10 | .720 | .618 | .728 |
| EvalMed  | -.030 | -.038 | -.087 | -.044 | .005 | .023 | .035 | .068 | 10 | .676 | .621 |
| EvalPsy | .081 | .053 | .021 | .021 | .115 | -.002 | -.093 | -.038 | .051 | 10 | .618 |
| CnsBhv | .120 | .089 | -.022 | .044 | .142 | -.077 | -.025 | .010 | -.063 | -.070 | 10 |

C. Model-estimated Thresholds

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variable | t1 | t2 | t3 | t4 |
| EffPrev  | -1.84 | -0.27 | 1.30 |  |
| EffMgt | -1.73 | -0.15 | 1.51 |  |
| ComfMI | -1.14 | -0.16 | 1.01 |  |
| ComfGls | -1.48 | -0.48 | 0.78 |  |
| SklMI | -1.47 | -0.57 | 0.40 | 1.39 |
| HxOb | -2.17 | -1.19 | -0.23 | 0.81 |
| DiscOb | -2.97 | -1.84 | -0.58 | 0.60 |
| EvalBhv | -2.97 | -2.01 | -0.74 | 0.49 |
| EvalMed  | -2.75 | -1.77 | -0.52 | 0.75 |
| EvalPsy | -2.37 | -0.90 | 0.05 | 1.17 |
| CnsBhv | -2.75 | -1.67 | -0.47 | 0.85 |

**Supplementary File 3.** Pearson Correlations for Independent and Self-efficacy Outcome Variables (n=704) a,b

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | Training MI  | Trainingcomorbidities | EHR registry  | EHR decision support | PCP time barrier | PCP role in obesity  | Adequate referral service barrier  | PCP payment available  | Referral payment barrier | Patients access to behavior barrier  | Patient time barrier  | Self-efficacyassessment index | Self-efficacy counseling index  |
| Training MI  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Training comorbidities | .424\* | 1 |  |  |  |  |  |  |  |  |  |  |  |
| EHR registry  | .095\* | .139\* | 1 |  |  |  |  |  |  |  |  |  |  |
| EHR decision support | .052 | .085\* | .202\* | 1 |  |  |  |  |  |  |  |  |  |
| PCP time barrier | -.011 | -.051 | -.120\* | -.072 | 1 |  |  |  |  |  |  |  |  |
| PCP role in obesity  | .074 | .057 | .008 | .014 | -.204\* | 1 |  |  |  |  |  |  |  |
| Adequate referral service barrier  | .050 | .024 | -.021 | -.041 | .229\* | -.252\* | 1 |  |  |  |  |  |  |
| PCP payment available  | -.003 | -.018 | .049 | .053 | -.058 | .174\* | -.197\* | 1 |  |  |  |  |  |
| Referral payment barrier | -.077 | -.005 | -.040 | -.062 | .158\* | -.104\* | .240\* | -.233\* | 1 |  |  |  |  |
| Patients access to behavior barrier  | .032 | -.018 | -.070 | .044 | .189\* | .097\* | .099\* | .088\* | -.057 | 1 |  |  |  |
| Patient time barrier  | -.056 | -.012 | -.035 | -.051 | .182\* | .042 | .061 | .006 | .042 | .343\* | 1 |  |  |
| Self-efficacyassessment index | .123\* | .161\* | .114\* | .059 | -.178\* | .236\* | -.162\* | .088\* | -.020 | .005 | -.052 | 1 |  |
| Self-efficacycounseling index | .214\* | .166\* | .122\* | .104\* | -.262\* | .418\* | -.266\* | .207\* | -.084\* | .043 | -.081\* | .505\* | 1 |

a Correlations are Pearson coefficients (2 continuous variables), Phi coefficients (2 dichotomous variables), or point-biserial correlations (continuous and dichotomous variables), based on all available cases; significant correlations (p<.05) are labeled (\*).

b Categorical variables use “no resource” (training or EMR support) as the reference condition.