### Supplementary Table S1. Estimated\* Weight and Change in Weight (95% CI) Overall and by Sex

|  |  |  |  |
| --- | --- | --- | --- |
| Weight, pounds | Enrolled | Not enrolled | Difference:Enrolled – not enrolled |
| Overall |  |  |  |
| Absolute weight  |  |  |  |
| Baseline  | 219.2 (218.2, 220.3) | 222.5 (222.1, 222.9) | -3.2 (-4.4, -2.1) |
| Month 7 | 208.1 (206.5, 219.8) | 221.4 (220.9, 221.9) | -13.2 (-14.9, -11.6) |
| Month 12 | 210.6 (208.9, 212.3) | 221.1 (220.6, 221.6) | -10.5 (-12.3, -8.7) |
| Month 24 | 213.6 (211.8, 215.3) | 219.7 (219.1, 220.3) | -6.1 (-8.0, -4.3) |
| Change in weight |  |  |  |
| Month 7 – Baseline | -11.1 (-12.9, -9.2) | -1.1 (-1.7, -0.5) | -10.0 (-11.9, -8.1) |
| Month 12 – Month 7  | 2.5 (1.1, 3.8) | -0.3 (-0.8, 0.2) | 2.7 (1.3, 4.2) |
| Month 12 – Baseline  | -8.6 (-10.4, -6.8) | -1.3 (-1.9, -0.8) | -7.3 (-9.2, -5.4) |
| Month 24 – Baseline  | -5.7 (-7.6, -3.7) | -2.8 (-3.5, -2.1) | -2.9 (-5.0, -0.8) |
|  Month 24 – Month 12 | 3.0 (1.5, 4.5) | -1.4 (-2.0, -0.8) | 4.4 (2.8, 6.0) |
| Men |  |  |  |
| Absolute weight  |  |  |  |
| Baseline  | 234.9 (233.8, 236.1) | 238.3 (237.7, 238.9) | -3.4 (-4.5, -2.2) |
| Month 7 | 222.8 (221.1, 224.5) | 267.9 (236.2, 237.5) | -14.1 (-15.8, -12.4) |
| Month 12 | 225.3 (223.5, 227.1) | 236.6 (235.9, 237.3) | -11.3 (-13.2, -9.5) |
|  Month 24 | 228.3 (226.4, 230.2) | 235.0 (234.2, 235.8) | -6.7 (-8.6, -4.8) |
| Change in weight |  |  |  |
| Month 7 – Baseline | -12.1 (-14.1, -10.2) | -1.4 (-2.2, -0.7) | -10.7 (-12.7, -8.7) |
| Month 12 – Month 7  | 2.5 (1.1, 3.9) | -0.3 (-0.9, 0.4) | 2.7 (1.3, 4.2) |
| Month 12 – Baseline  | -9.7 (-11.6, -7.7) | -1.7 (-2.4, -0.9) | -8.0 (-9.9, -6.0) |
|  Month 24 – Baseline  | -6.7 (-8.8, -4.6) | -3.4 (-4.2, -2.5) | -3.3 (-5.5, -1.2) |
|  Month 24 – Month 12 | 3.0 (1.4, 4.5) | -1.7 (-2.4, -0.9) | 4.6 (3.1, 6.2) |
| Women |  |  |  |
| Absolute weight  |  |  |  |
| Baseline  | 206.9 (205.8, 208.0) | 210.0 (209.6, 210.5) | -3.1 (-4.3, -2.0) |
| Month 7 | 196.6 (195.0, 198.3) | 209.3 (208.7, 209.8) | -12.6 (-14.3, -10.9) |
|  Month 12 | 199.1 (197.4, 200.8) | 209.0 (208.4, 209.5) | -9.9 (-11.7, -8.1) |
| Month 24 | 202.1 (200.3, 203.8) | 207.7 (207.0, 208.4) | -5.7 (-7.6, -3.8) |
| Change in weight |  |  |  |
| Month 7 – Baseline | -10.3 (-12.1, -8.4) | -0.8 (-1.4, -0.2) | -9.5 (-11.4, -7.5) |
| Month 12 – Month 7  | 2.5 (1.0, 3.9) | -0.3 (-0.7, 0.2) | 2.7 (1.2, 4.2) |
| Month 12 – Baseline  | -7.8 (-9.6, -6.0) | -1.1 (-1.6, -0.5) | -6.7 (-8.6, -4.8) |
| Month 24 – Baseline  | -4.8 (-6.8, -2.9) | -2.3 (-3.0, -1.6) | -2.5 (-4.6, -0.4) |
| Month 24 – Month 12 | 2.9 (1.4, 4.5) | -1.2 (-1.8, -0.7) | 4.2 (2.5, 5.9) |

\*Estimates (95% CIs) are marginal weights from a mixed effects model, with time since baseline modeled using a linear spline with two knots at 7 months and 12 months. The model includes a random intercept and 3 random slopes (one for each time spline term); we used unstructured correlation structure for the random effects. The model was adjusted for age, race (white; non-white), exercise status (no exercise; 10-140 minutes per week; ≥150minutes per week; missing), Charlson index (0, 1, 2, or 3+ comorbidities), tobacco use (current; former; never), neighborhood percent high school or less, neighborhood median household income, estimated propensity score for enrolling in DPP online, baseline weight, mental health diagnosis in the past year (yes/no), metformin use. The model also includes a two-way interaction term between time and digital DPP enrollment status, a two-way interaction of time by weight at enrollment, and a three-way interaction of time by mental health condition at baseline by enrollment status. All covariates were held constant at their means (overall means, or sex-specific means) to estimate marginal weights overall and for men and women at the time points shown in the table.

Supplementary Table S2. Estimated\* Percent Change in Weight (95% CI) Over Time by Digital DPP Enrollment Status

|  |  |  |  |
| --- | --- | --- | --- |
|  | Enrolled in DPP online | Not enrolled in DPP online | Difference:Enrolled – not enrolled |
| Estimated % weight change |  |  |  |
| Month 7 – Baseline | -4.7% (-5.5, -3.9) | -0.4% (-0.6, -0.1) | -4.3% (-5.2, -3.5) |
| Month 12 – Baseline  | -4.0% (-4.8, -3.2) | -0.6% (-0.8, -0.4) | -3.4% (-4.2, -2.6) |
| Month 24 – Baseline  | -2.3% (-3.2, -1.4) | -1.1% (-1.4, -0.8) | -1.2% (-2.1, -0.2) |

\* Estimates (95% CIs) are marginal weights from a mixed effects model, with time since baseline modeled using a linear spline with a knot at 7 months. The outcome in this model is percent weight change from baseline, calculated as the (weight at follow-up – baseline weight)/(baseline weight). The model includes a random intercept and 2 random slopes (one for each time spline term); we used unstructured correlation structure for the random effects. The model was adjusted for age, race (white; non-white), exercise status (no exercise; 10-140 minutes per week; ≥150minutes per week; missing), Charlson index (0, 1, 2, or 3+ comorbidities), tobacco use (current; former; never), neighborhood percent high school or less, neighborhood median household income, estimated propensity score for enrolling in DPP online, baseline weight, mental health diagnosis in the past year (yes/no), metformin use. The model also includes two-way interactions between each time spline with baseline weight, sex, and DPP online enrollment status. All covariates were held constant at their means (overall means) to estimate marginal percent weight change.

### Supplementary Table S3. Estimated\* A1c and Change in A1c (95% CI) Overall and by Sex

|  |  |  |  |
| --- | --- | --- | --- |
| A1c, % | Enrolled | Not enrolled | Difference:Enrolled – not enrolled |
| Overall |  |  |  |
| Absolute A1c  |  |  |  |
| Baseline  | 5.91 (5.84, 5.97) | 5.94 (5.92, 5.97) | -0.04 (-0.10, 0.03) |
| Month 7 | 5.86 (5.83, 5.89) | 6.01 (6.00, 6.03) | -0.15 (-0.19, -0.12) |
| Month 12 | 5.88 (5.85, 5.90) | 6.01 (6.00, 6.03) | -0.14 (-0.16, -0.11) |
| Month 24 | 5.93 (5.90, 5.96) | 6.02 (6.01, 6.04) | -0.09 (-0.12, -0.06) |
| Change in A1c |  |  |  |
| Month 7 – baseline | -0.05 (-0.13, 0.02) | 0.07 (0.04, 0.10) | -0.12 (-0.20, -0.04) |
| Month 12 – month 7  | 0.02 (0.01, 0.03) | 0.00 (0.00, 0.01) | 0.02 (0.01, 0.03) |
| Month 12 – baseline  | -0.03 (-0.10, 0.04) | 0.07 (0.04, 0.10) | -0.10 (-0.18, -0.02) |
| Month 24 – baseline  | 0.02 (-0.05, 0.09) | 0.08 (0.06, 0.10) | -0.06 (-0.13, 0.01) |
| Men |  |  |  |
| Absolute A1c |  |  |  |
| Baseline  | 5.92 (5.85, 5.98) | 5.95 (5.93, 5.98) | -0.04 (-0.10, 0.03) |
| Month 7 | 5.87 (5.84, 5.90) | 6.02 (6.00, 6.04) | -0.15 (-0.19, -0.12) |
| Month 12 | 5.89 (5.86, 5.92) | 6.03 (6.01, 6.04) | -0.14 (-0.16, -0.11) |
| Month 24 | 5.94 (5.91, 5.97) | 6.03 (6.02, 6.05) | -0.09 (-0.12, -0.06) |
| Change in A1c |  |  |  |
| Month 7 – baseline | -0.05 (-0.13, 0.02) | 0.07 (0.04, 0.10) | -0.12 (-0.20, -0.04) |
| Month 12 – month 7  | 0.02 (0.01, 0.03) | 0.00 (0.00, 0.01) | 0.02 (0.01, 0.03) |
| Month 12 – baseline  | -0.03 (-0.10, 0.04) | 0.07 (0.04, 0.10) | -0.10 (-0.18, -0.02) |
| Month 24 – baseline  | 0.02 (-0.05, 0.09) | 0.08 (0.06, 0.10) | -0.06 (-0.13, 0.01) |
| Women |  |  |  |
| Absolute A1c |  |  |  |
| Baseline  | 5.90 (5.84, 5.96) | 5.93 (5.91, 5.96) | -0.04 (-0.10, 0.03) |
| Month 7 | 5.85 (5.82, 5.88) | 6.00 (5.99, 6.02) | -0.15 (-0.19, -0.12) |
| Month 12 | 5.87 (5.84, 5.90) | 6.01 (5.99, 6.02) | -0.14 (-0.16, -0.11) |
| Month 24 | 5.92 (5.89, 5.95) | 6.01 (5.99, 6.03) | -0.09 (-0.12, -0.06) |
| Change in A1c |  |  |  |
| Month 7 – baseline | -0.05 (-0.13, 0.02) | 0.07 (0.04, 0.10) | -0.12 (-0.20, -0.04) |
| Month 12 – month 7  | 0.02 (0.01, 0.03) | 0.00 (0.00, 0.01) | 0.02 (0.01, 0.03) |
| Month 12 – baseline  | -0.03 (-0.10, 0.04) | 0.07 (0.04, 0.10) | -0.10 (-0.18, -0.02) |
| Month 24 – baseline  | 0.02 (-0.05, 0.09) | 0.08 (0.06, 0.10) | -0.06 (-0.13, 0.01) |

\* Estimates (95% CIs) are marginal weights from a mixed effects model, with time since baseline modeled using a linear spline with a knot at 7 months. The outcome in this model is percent weight change from baseline, calculated as the (weight at follow-up – baseline weight)/(baseline weight). The model includes a random intercept and 2 random slopes (one for each time spline term); we used unstructured correlation structure for the random effects. The model was adjusted for age, race (white; non-white), exercise status (no exercise; 10-140 minutes per week; ≥150minutes per week; missing), Charlson index (0, 1, 2, or 3+ comorbidities), tobacco use (current; former; never), neighborhood percent high school or less, neighborhood median household income, estimated propensity score for enrolling in DPP online, baseline weight, mental health diagnosis in the past year (yes/no), metformin use. The model also includes two-way interactions between each time spline with baseline weight, sex, and DPP online enrollment status. All covariates were held constant at their means (overall means) to estimate marginal percent weight change.

Supplementary Figure S1. Distribution of Propensity Scores in Full and Matched Cohort for Weight



Legend: Logit propensity scores were calculated from a logistic regression with enrollment status as the outcome and covariates were the same as those in our LDA models. Matching was done using the logit propensity score and was 1:1 without replacement using caliper of 0.11 (20% of one standard deviation of the logit). One enrolled person was not matched and dropped from subsequent weight analyses.