

FIGURE TITLES AND CAPTIONS (Figure S1 and Figure S2 in Supporting Information)

Figure S1: Perceived Comfort in Discussing Various Weight Loss Tools

PCPs overall felt most comfortable discussing exercise and this did not change after the intervention. PCPs overall felt least comfortable discussing phentermine/topiramate ER before the study, but only PCP-I were more comfortable discussing phentermine/topiramate ER after the trial. Also, only PCP-I became more comfortable discussing phentermine after the trial.

Figure S2: Perceived Effectiveness of Various Weight Loss Tools

PCPs initially rated exercise as one of the most effective tools for weight loss, but only PCP-I felt exercise was less effective as an intervention after the trial. Only PCP-I rated phentermine more effective after compared to before the study. Both PCP-C and PCP-I rated phentermine/topiramate ER more effective post-intervention compared to pre-intervention.

TITLE: Effects of Education and Experience on Primary Care Providers' Perspectives of Obesity Treatments during a Pragmatic Trial

AUTHORS: Sean Iwamoto¹, David Saxon^{1,2}, Adam Tsai³, Erin Leister^{4,5}, Rebecca Speer⁶, Hilde Heyn⁶, Elizabeth Kealey⁷, Elizabeth Juarez-Colunga^{4,5}, Kimberly Gudzone^{8,9}, Sara Bleich¹⁰, Jeanne Clark^{8,9}, Daniel Bessesen^{1,6}

AFFILIATION:

1. Division of Endocrinology, Metabolism and Diabetes, University of Colorado School of Medicine, Anschutz Medical Campus, Aurora, CO, USA
2. Department of Endocrinology, Denver Veterans Affairs Medical Center, Denver, CO, USA
3. Department of Internal Medicine, Kaiser Permanente, Denver, CO, USA
4. Department of Biostatistics and Informatics, Colorado School of Public Health, Aurora, CO, USA
5. Adult and Child Consortium for Outcomes Research and Delivery Science (ACCORDS), University of Colorado School of Medicine, Aurora, CO, USA
6. Denver Health Medical Center, Denver, CO, USA
7. Anschutz Health and Wellness Center, University of Colorado, Anschutz Medical Campus, Aurora, CO, USA
8. Department of Medicine, Division of General Internal Medicine, The Johns Hopkins University School of Medicine, Baltimore, MD, USA
9. Welch Center for Prevention, Epidemiology, and Clinical Research, The Johns Hopkins University, Baltimore, MD, USA
10. Department of Health Policy and Management, Harvard T.H. Chan School of Public Health, Boston, MA, USA

CONTACT INFO:

Sean Iwamoto, M.D.

University of Colorado, School of Medicine

Division of Endocrinology, Metabolism and Diabetes

12801 E 17th Ave, Mail Stop: 8106

Aurora, CO 80045

E-mail: sean.iwamoto@ucdenver.edu

SUPPORTING INFORMATION

Table S1: Perceived Comfort in Discussing Various Weight Loss Tools*

	Statistics	Pre-intervention (N=85)			Post-intervention (N=82)		
		PCP-C† (n=37)	PCP-I‡ (n=48)	p-value§	PCP-C (n=41)	PCP-I (n=41)	p-value
Lifestyle modification programs/commercial weight loss programs	Median (IQR)¶	7 (5-8)	7 (6-8)	0.43	7 (6-9)	7 (6-8)	0.79
Portion-controlled foods/meal replacements	Median (IQR)	6 (3-7)	5 (4-7)	0.58	6 (4-7)	6 (5-7)	0.32
Exercise	Median (IQR)	7 (4-8)	8 (7-9)	0.23	8 (7-10)	8 (7-9)	0.19
Phentermine	Median (IQR)	5 (3-7)	7¶ (4-8)	0.13	6 (4-8)	8 (7-9)	0.02
Phentermine/topiramate ER	Median (IQR)	2 (0-5)	4¶ (2-6)	0.03	4# (1-5.5)	6 (5-8)	<0.001

* Questions rated from 0 (Least comfortable) to 10 (Most comfortable)

† PCP-C = Control Clinic PCPs

‡ PCP-I = Intervention Clinic PCPs

§ p-values calculated using Wilcoxin rank sum test

¶ IQR = Interquartile range (Q1-Q3)

¶ n=47 for pre-intervention PCP-I and phentermine and phentermine/topiramate ER

n=40 for post-intervention PCP-C and phentermine/topiramate ER

SUPPORTING INFORMATION

Table S2: Perceived Effectiveness of Various Weight Loss Tools*

	Statistics	Pre-intervention (N=85)			Post-intervention (N=82)		
		PCP-C† (n=37)	PCP-I‡ (n=48)	p-value§	PCP-C (n=41)	PCP-I (n=41)	p-value
Lifestyle modification programs/commercial weight loss programs	Median (IQR)¶	8 (6-9)	7# (5-8)	0.12	7 (5-8)	7 (6-8)	0.70
Portion-controlled foods/meal replacements	Median (IQR)	6 (5-7)	7 (5-8)	0.23	6 (4-8)	7 (6-8)	0.04
Exercise	Median (IQR)	8 (6-9)	7 (4-8.5)	0.01	7 (5-9)	5 (3-7)	0.001
Phentermine	Median (IQR)	5 (4-7)	5** (5-7)	0.14	6‡‡ (4-7)	7 (6-8)	0.001
Phentermine/topiramate ER	Median (IQR)	4¶¶ (2-5)	6†† (5-8)	0.001	6§§ (4-7)	7 (6-8)	0.005

* Questions rated from 0 (Least effective) to 10 (Most effective)

† PCP-C = Control Clinic PCPs

‡ PCP-I = Intervention Clinic PCPs

§ p-values calculated using Wilcoxin rank sum test

¶ IQR = Interquartile range (Q1-Q3)

¶¶ n=32 for pre-intervention PCP-C and phentermine/topiramate ER

n=47 for pre-intervention PCP-I and lifestyle

** n=46 for pre-intervention PCP-I and phentermine

†† n=45 for pre-intervention PCP-I and phentermine/topiramate ER

‡‡ n=40 for post-intervention PCP-C and phentermine

§§ n=38 for post-intervention PCP-C and phentermine/topiramate ER

SUPPORTING INFORMATION

Table S3: Provider Views on Obesity and Weight Loss Counseling

Question*	Statistics	Pre-intervention (N=85)			Post-intervention (N=82)		
		PCP-C† (n=37)	PCP-I‡ (n=48)	p-value§	PCP-C (n=41)	PCP-I (n=41)	p-value
How significant a problem do you think obesity is for your patients?	Median (IQR)¶	8 (8-10)	9 (8-10)	0.54	9 (8-9)	8 (8-9)	0.49
How comfortable are you overall in discussing weight with your patients?	Median (IQR)	8 (7-9)	8¶ (6-9)	0.38	8 (7-9)	8 (7-9)	0.36
Do you think your advice to a patient to take action to lose weight has an impact?	Median (IQR)	6 (5-7)	5.5 (5-7)	0.36	5 (4-6)	6 (5-7)	0.08
How comfortable are you in counseling patients on your own for weight loss?	Median (IQR)	7 (6-8)	7 (6-8)	0.60	7 (6-8)	7 (5-8)	0.77

* Questions rated from 0 (Least significant, comfortable or impact) to 10 (Most significant, comfortable or impact)

† PCP-C = Control Clinic PCPs

‡ PCP-I = Intervention Clinic PCPs

§ p-values calculated using Wilcoxon rank sum test

¶ IQR = Interquartile range (Q1-Q3)

¶ n=47 for pre-intervention PCP-I and comfort discussing weight

TITLE: Effects of Education and Experience on Primary Care Providers' Perspectives of Obesity Treatments during a Pragmatic Trial

AUTHORS: Sean Iwamoto¹, David Saxon^{1,2}, Adam Tsai³, Erin Leister^{4,5}, Rebecca Speer⁶, Hilde Heyn⁶, Elizabeth Kealey⁷, Elizabeth Juarez-Colunga^{4,5}, Kimberly Gudzone^{8,9}, Sara Bleich¹⁰, Jeanne Clark^{8,9}, Daniel Bessesen^{1,6}

AFFILIATION:

1. Division of Endocrinology, Metabolism and Diabetes, University of Colorado School of Medicine, Anschutz Medical Campus, Aurora, CO, USA
2. Department of Endocrinology, Denver Veterans Affairs Medical Center, Denver, CO, USA
3. Department of Internal Medicine, Kaiser Permanente, Denver, CO, USA
4. Department of Biostatistics and Informatics, Colorado School of Public Health, Aurora, CO, USA
5. Adult and Child Consortium for Outcomes Research and Delivery Science (ACCORDS), University of Colorado School of Medicine, Aurora, CO, USA
6. Denver Health Medical Center, Denver, CO, USA
7. Anschutz Health and Wellness Center, University of Colorado, Anschutz Medical Campus, Aurora, CO, USA
8. Department of Medicine, Division of General Internal Medicine, The Johns Hopkins University School of Medicine, Baltimore, MD, USA
9. Welch Center for Prevention, Epidemiology, and Clinical Research, The Johns Hopkins University, Baltimore, MD, USA
10. Department of Health Policy and Management, Harvard T.H. Chan School of Public Health, Boston, MA, USA

CONTACT INFO:

Sean Iwamoto, M.D.
University of Colorado, School of Medicine
Division of Endocrinology, Metabolism and Diabetes
12801 E 17th Ave, Mail Stop: 8106
Aurora, CO 80045
E-mail: sean.iwamoto@ucdenver.edu

SUPPORTING INFORMATION: Survey S1

Pre-intervention survey

Study Title: A Toolbox Approach to Obesity in Primary Care

Principal Investigator: Dr. Daniel Bessesen

COMIRB No: 10-1127

Version Date: January 31st, 2014

You are being asked to be in this research study because the study team is interested in understanding the practicality of treating obesity in primary care clinics at Denver Health.

This study is designed to learn more about providers' attitudes toward and comfort with treating obese patients. We also want to know if these attitudes and comfort levels change over time.

If you join the study, you will fill out this anonymous survey. We will only make note of everyone who fills one out, but not whose questionnaire belongs to whom.

Possible discomforts or risks include taking the time to fill this questionnaire out now. Your answers are anonymous, so there isn't a risk of your opinions being known to anyone, including the research team. There may be risks the researchers have not thought of.

Every effort will be made to protect your privacy and confidentiality by making the questionnaire anonymous. We will know whether or not you take it because of the meeting sign in sheet, but not which questionnaire belongs to you. The questionnaires will be locked up and there is no page that requires your signature.

This research is being paid for by a PCORI grant.

You have a choice about being in this study. You do not have to be in this study if you do not want to be.

If you have questions, you can call Dr. Daniel Bessesen, at 303-602-5021, or Rebecca Speer (Research Projects Coordinator) at 303-602-4858. You can call and ask questions at any time. If you prefer, you can also email us at Daniel.bessesen@dhha.org or Rebecca.speer@dhha.org.

You may have questions about your rights as someone in this study. If you have questions, you can call the COMIRB (the responsible Institutional Review Board). Their number is (303) 724-1055.

By completing this survey, you are agreeing to participate in this research study. Should you choose to participate, we appreciate your time.

How comfortable are you in discussing with your patients the risks and benefits of phentermine for weight loss?

0 1 2 3 4 5 6 7 8 9 10
 LEAST COMFORTABLE MOST COMFORTABLE

How effective do you think phentermine is for weight loss?

0 1 2 3 4 5 6 7 8 9 10
 LEAST EFFECTIVE MOST EFFECTIVE

How comfortable are you in discussing with your patients the risks and benefits of phentermine/topiramate ER (Qsymia®) for weight loss?

0 1 2 3 4 5 6 7 8 9 10
 LEAST COMFORTABLE MOST COMFORTABLE

How effective do you think phentermine/topiramate ER (Qsymia®) is for weight loss?

0 1 2 3 4 5 6 7 8 9 10
 LEAST EFFECTIVE MOST EFFECTIVE

How significant a barrier are the following for you in providing advice on weight loss treatments? Please circle one number for each potential barrier.

Lack of time in the visit to discuss weight

0 1 2 3 4 5 6 7 8 9 10
 LEAST IMPORTANT MOST IMPORTANT

Insufficient training in weight management

0 1 2 3 4 5 6 7 8 9 10
 LEAST IMPORTANT MOST IMPORTANT

Lack of safe/effective treatments for weight loss

0 1 2 3 4 5 6 7 8 9 10
 LEAST IMPORTANT MOST IMPORTANT

Lack of patient adherence to recommendations

0 1 2 3 4 5 6 7 8 9 10
 LEAST IMPORTANT MOST IMPORTANT

Lack of reimbursement for treatments

0 1 2 3 4 5 6 7 8 9 10
 LEAST IMPORTANT MOST IMPORTANT

Other barrier (please specify) _____

0 1 2 3 4 5 6 7 8 9 10
 LEAST IMPORTANT MOST IMPORTANT

SUPPORTING INFORMATION: Survey S2

Post-intervention survey

Study Title: A Toolbox Approach to Obesity in Primary Care

Principal Investigator: Dr. Daniel Bessesen

COMIRB No: 10-1127

Version Date: January 31st, 2014

You are being asked to be in this research study because the study team is interested in understanding the practicality of treating obesity in primary care clinics at Denver Health.

This study is designed to learn more about providers' attitudes toward and comfort with treating obese patients. We also want to know if these attitudes and comfort levels change over time.

If you join the study, you will fill out this anonymous survey. We will only make note of everyone who fills one out, but not whose questionnaire belongs to whom.

Possible discomforts or risks include taking the time to fill this questionnaire out now. Your answers are anonymous, so there isn't a risk of your opinions being known to anyone, including the research team. There may be risks the researchers have not thought of.

Every effort will be made to protect your privacy and confidentiality by making the questionnaire anonymous. We will know whether or not you take it because of the meeting sign in sheet, but not which questionnaire belongs to you. The questionnaires will be locked up and there is no page that requires your signature.

This research is being paid for by a PCORI grant.

You have a choice about being in this study. You do not have to be in this study if you do not want to be.

If you have questions, you can call Dr. Daniel Bessesen, at 303-602-5021, or Rebecca Speer (Research Projects Coordinator) at 303-602-4858. You can call and ask questions at any time. If you prefer, you can also email us at Daniel.bessesen@dhha.org or Rebecca.speer@dhha.org.

You may have questions about your rights as someone in this study. If you have questions, you can call the COMIRB (the responsible Institutional Review Board). Their number is (303) 724-1055.

By completing this survey, you are agreeing to participate in this research study. Should you choose to participate, we appreciate your time.

0 1 2 3 4 5 6 7 8 9 10
LEAST COMFORTABLE MOST COMFORTABLE

How effective do you think phentermine is for weight loss?

0 1 2 3 4 5 6 7 8 9 10
LEAST EFFECTIVE MOST EFFECTIVE

How comfortable are you in discussing with your patients the risks and benefits of phentermine/topiramate ER (Qsymia®) for weight loss?

0 1 2 3 4 5 6 7 8 9 10
LEAST COMFORTABLE MOST COMFORTABLE

How effective do you think phentermine/topiramate ER (Qsymia®) is for weight loss?

0 1 2 3 4 5 6 7 8 9 10
LEAST EFFECTIVE MOST EFFECTIVE

How significant a barrier are the following for you in providing advice on weight loss treatments? Please circle one number for each potential barrier.

Lack of time in the visit to discuss weight

0 1 2 3 4 5 6 7 8 9 10
LEAST IMPORTANT MOST IMPORTANT

Insufficient training in weight management

0 1 2 3 4 5 6 7 8 9 10
LEAST IMPORTANT MOST IMPORTANT

Lack of safe/effective treatments for weight loss

0 1 2 3 4 5 6 7 8 9 10
LEAST IMPORTANT MOST IMPORTANT

Lack of patient adherence to recommendations

0 1 2 3 4 5 6 7 8 9 10
LEAST IMPORTANT MOST IMPORTANT

Lack of reimbursement for treatments

0 1 2 3 4 5 6 7 8 9 10
LEAST IMPORTANT MOST IMPORTANT

Other barrier (please specify) _____

0 1 2 3 4 5 6 7 8 9 10
LEAST IMPORTANT MOST IMPORTANT

Did you take the pre-intervention survey two years ago? Please circle Y / N

How many months did you work at Westside, Eastside, LOP, and/or FIM clinic(s) between September 2014 and August 2016? _____

TITLE: Effects of Education and Experience on Primary Care Providers' Perspectives of Obesity Treatments during a Pragmatic Trial

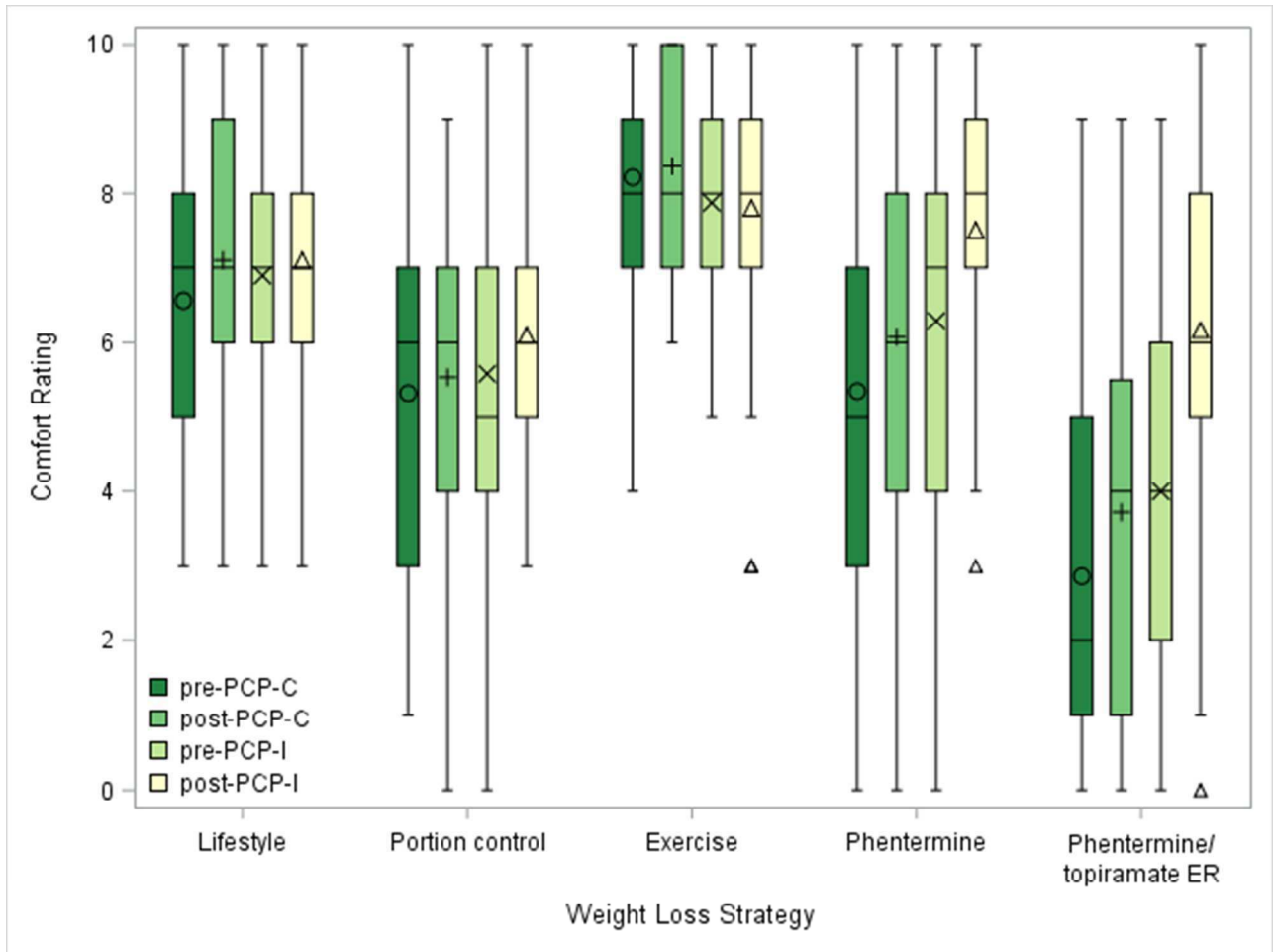
AUTHORS: Sean Iwamoto¹, David Saxon^{1,2}, Adam Tsai³, Erin Leister^{4,5}, Rebecca Speer⁶, Hilde Heyn⁶, Elizabeth Kealey⁷, Elizabeth Juarez-Colunga^{4,5}, Kimberly Gudzone^{8,9}, Sara Bleich¹⁰, Jeanne Clark^{8,9}, Daniel Bessesen^{1,6}

AFFILIATION:

1. Division of Endocrinology, Metabolism and Diabetes, University of Colorado School of Medicine, Anschutz Medical Campus, Aurora, CO, USA
2. Department of Endocrinology, Denver Veterans Affairs Medical Center, Denver, CO, USA
3. Department of Internal Medicine, Kaiser Permanente, Denver, CO, USA
4. Department of Biostatistics and Informatics, Colorado School of Public Health, Aurora, CO, USA
5. Adult and Child Consortium for Outcomes Research and Delivery Science (ACCORDS), University of Colorado School of Medicine, Aurora, CO, USA
6. Denver Health Medical Center, Denver, CO, USA
7. Anschutz Health and Wellness Center, University of Colorado, Anschutz Medical Campus, Aurora, CO, USA
8. Department of Medicine, Division of General Internal Medicine, The Johns Hopkins University School of Medicine, Baltimore, MD, USA
9. Welch Center for Prevention, Epidemiology, and Clinical Research, The Johns Hopkins University, Baltimore, MD, USA
10. Department of Health Policy and Management, Harvard T.H. Chan School of Public Health, Boston, MA, USA

CONTACT INFO:

Sean Iwamoto, M.D.
University of Colorado, School of Medicine
Division of Endocrinology, Metabolism and Diabetes
12801 E 17th Ave, Mail Stop: 8106
Aurora, CO 80045
E-mail: sean.iwamoto@ucdenver.edu

SUPPORTING INFORMATION: Figure S1**LEGEND:**

pre-PCP-C: pre-intervention control clinics
 post-PCP-C: post-intervention control clinics
 pre-PCP-I: pre-intervention control clinics
 post-PCP-I: post-intervention control clinics

○, +, ×, △: mean for the respective box plot; symbols outside a box are outliers.

TITLE: Effects of Education and Experience on Primary Care Providers' Perspectives of Obesity Treatments during a Pragmatic Trial

AUTHORS: Sean Iwamoto¹, David Saxon^{1,2}, Adam Tsai³, Erin Leister^{4,5}, Rebecca Speer⁶, Hilde Heyn⁶, Elizabeth Kealey⁷, Elizabeth Juarez-Colunga^{4,5}, Kimberly Gudzone^{8,9}, Sara Bleich¹⁰, Jeanne Clark^{8,9}, Daniel Bessesen^{1,6}

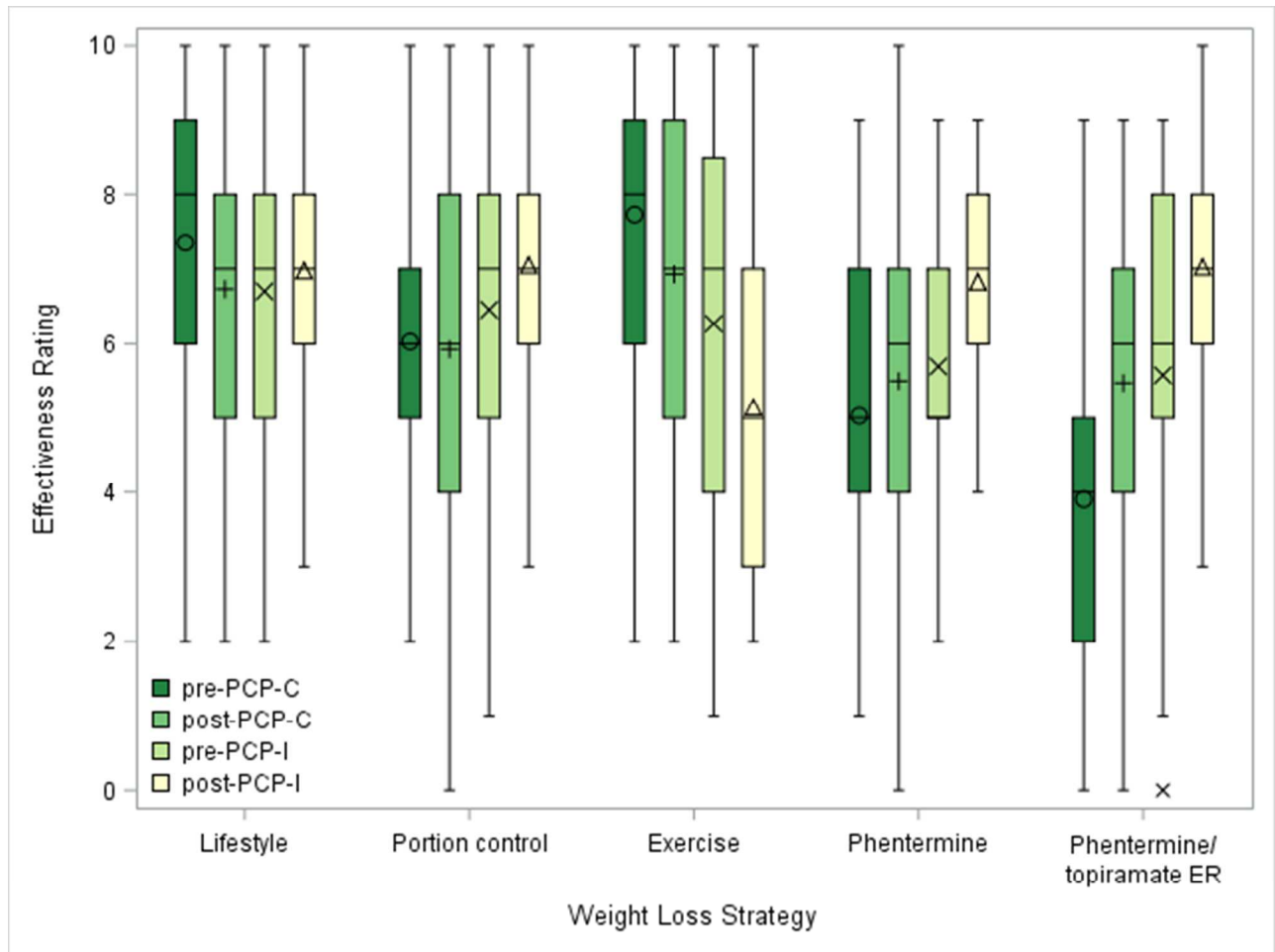
AFFILIATION:

1. Division of Endocrinology, Metabolism and Diabetes, University of Colorado School of Medicine, Anschutz Medical Campus, Aurora, CO, USA
2. Department of Endocrinology, Denver Veterans Affairs Medical Center, Denver, CO, USA
3. Department of Internal Medicine, Kaiser Permanente, Denver, CO, USA
4. Department of Biostatistics and Informatics, Colorado School of Public Health, Aurora, CO, USA
5. Adult and Child Consortium for Outcomes Research and Delivery Science (ACCORDS), University of Colorado School of Medicine, Aurora, CO, USA
6. Denver Health Medical Center, Denver, CO, USA
7. Anschutz Health and Wellness Center, University of Colorado, Anschutz Medical Campus, Aurora, CO, USA
8. Department of Medicine, Division of General Internal Medicine, The Johns Hopkins University School of Medicine, Baltimore, MD, USA
9. Welch Center for Prevention, Epidemiology, and Clinical Research, The Johns Hopkins University, Baltimore, MD, USA
10. Department of Health Policy and Management, Harvard T.H. Chan School of Public Health, Boston, MA, USA

CONTACT INFO:

Sean Iwamoto, M.D.
University of Colorado, School of Medicine
Division of Endocrinology, Metabolism and Diabetes
12801 E 17th Ave, Mail Stop: 8106
Aurora, CO 80045
E-mail: sean.iwamoto@ucdenver.edu

SUPPORTING INFORMATION: Figure S2



LEGEND:

pre-PCP-C: pre-intervention control clinics
 post-PCP-C: post-intervention control clinics
 pre-PCP-I: pre-intervention control clinics
 post-PCP-I: post-intervention control clinics

○, +, ×, Δ: mean for the respective box plot; symbols outside a box are outliers.