Supplementary Data

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Supplementary Table 1

Equations for calculating HOMA-IR , LDL-cholesterol, NAFLD liver fat score and NAFLD fibrosis score

Score	Equation
HOMA-IR (insulin derived)	[fasting insulin (mU/L) x fasting glucose (mg/dL)]/ 405
HOMA-IR (c-peptide derived)	Calculation performed using spreadsheet downloaded from http://www.dtu.ox.ac.uk/homacalculator/
Friedewald LDL-cholesterol	total cholesterol (mg/dL) - HDL cholesterol (mg/dL) - [TG (mg/dL)/5]
NAFLD liver fat score (N-LFS)	-2.89 + 1.18 x metabolic syndrome (yes=1 or no=0) + 0.45 x type 2 diabetes (yes=2 or no=0)* + 0.15 x fasting insulin (mU/l) + 0.04 x fasting serum AST (U/L) – 0.94 x AST/ALT
NAFLD fibrosis score (NFS)	$-1.675 + 0.037 \times$ Age (yrs) $+ 0.094 \times$ BMI (kg/m^2) $+ 1.13 \times$ IFG/diabetes (yes = 1, no = 0) $+ 0.99 \times$ AST/ALT ratio $- 0.013 \times$ Platelet ($\times 10^9$/L) $- 0.66 \times$ Albumin (g/dl)

Supplementary Table 2

Criteria and cut-offs for diabetes reversal, diabetes partial and complete remission, metabolic syndrome, steatosis and absence of fibrosis

Disease outcomes	Criteria and cut-offs used for assignment
Diabetes reversal	Sub-diabetic hyperglycemia and normoglycemia (HbA1c below 6.5%), without medications except metformin
Diabetes partial remission (S1)	Sub-diabetic hyperglycemia of at least 1 year duration, HbA1c level between 5.7-6.5%, without any medications (two HbA1c measurements)
Diabetes complete remission (S1)	Normoglycemia of at least 1 year duration, HbA1c below 5.7%, without any medications (two HbA1c measurements)
Metabolic syndrome (S3,S4)	Assigned according to the new International Diabetes Federation (IDF) and National Cholesterol Education Program's Adult Treatment Panel III (NCEP ATP III)] classification. Metabolic syndrome is assigned if any three of the following five factors were listed:

1) **Central obesity** defined using BMI and waist circumference: ≥ 40 inches for male and ≥ 37 inches for female. Those missing waist circumference information, if BMI ≥ 30kg/m^2, central obesity is assumed.
2) **Raised triglycerides**: ≥ 150 mg/dL (1.7 mmol/L)
3) **Reduced HDL-cholesterol**: < 40 mg/dL (1.03mmol/L) in males or < 50 mg/dL (1.29mmol/L) in females
4) **Raised fasting blood glucose**: ≥ 100 mg/dL
5) **Raised blood pressure**: systolic BP ≥ 130 or diastolic BP ≥ 85mmHg

For those with missing data:

A) If patient is missing more than two criteria from the five factors, he/she is classified as missing or no assignment.

B) If patient is missing two or fewer criteria excluding central obesity and any of the remaining criteria were classified positive (present); he/she is assigned as “having metabolic syndrome”

C) If patient is missing only one criteria excluding central obesity and if the remaining criteria were classified negative (not present), he/she is assigned as “not having metabolic syndrome”.

Suspected steatosis (S4)	Optimal cut-off point of > -0.640 predicts increased liver fat content (suspected steatosis) with sensitivity of 86% and specificity of 71%.

Absence of fibrosis (S5)	Optimal cut-off point of < -1.455 predicts absence of significant fibrosis with a negative predictive value of 93%.

Supplementary Table 3
Descriptives and results of completer-only analyses

	Baseline			1 Year			2 Years			
	N	Mean (SD) or ±SE	Range	N	Mean (SD) or ±SE	Range	N	Mean (SD) or ±SE	Range	P
Glycemic										
Hemoglobin A1c (%)[a] CCI-all education Usual Care CCI-all vs. usual care	 262 87	 7.6(1.5) 7.6(1.8)	 5.3-13.6 5.1-12.5	 204 76	 6.2(0.9) 7.9(1.8)	 4.50-12.0 5.3-13.6	 183 68	 6.6(1.3) 8.2(2.0)	 4.8-12.5 5.6-13.8	 9.9×10^{-16} 0.01 1.9×10^{-10}
C-Peptide (nmol L^{-1})[a] CCI-all education Usual Care CCI-all vs. usual care	 248 79	 4.4(2.2) 4.2(2.5)	 0.01-12.4 0.3-11.2	 196 63	 3.4(1.8) 4.3(2.8)	 0.01-12.4 0.3-15.3	 173 57	 3.3(1.7) 3.4(1.9)	 0.01-11.4 0.3-7.4	 1.5×10^{-15} 0.76 0.25
Fasting glucose (mg/dL)[a] CCI-all education Usual Care CCI-all vs. usual care	 258 86	 160.8(61.4) 156.2(72.6)	 70.0-418.0 40.0-356.0	 205 76	 124.0(35.2) 166.9(83.0)	 71.0-318.0 50.0-514.0	 179 67	 131.1(44.8) 181.2(90.1)	 42.0-363.0 65.0-466.0	 5.9×10^{-8} 0.10 3.6×10^{-6}
Fasting Insulin (mIU L^{-1})[a,c] CCI-all education Usual Care CCI-all vs. usual care	 248 79	 28.6(23.9) 29.1(24.9)	 2.5-209.5 0.4-122.6	 196 63	 18.0(24.2) 30.8(33.7)	 0.9-285.7 2.3-205.1	 172 57	 17.5(25.2) 23.0(18.7)	 0.6-312.4 4.3-114.5	 1.9×10^{-15} 0.98 0.004
HOMA-IR (insulin derived), all[a,c] CCI-all education Usual Care CCI-all vs. usual care	 220 78	 9.0(6.2) 10.6(9.1)	 1.0-42.4 0.05-44.7	 181 61	 4.8(3.7) 12.7(12.6)	 0.7-20.4 0.4-52.6	 162 56	 5.9(9.9) 10.4(9.3)	 0.1-118.0 1.2-39.3	 2.1×10^{-12} 0.28

										2.2×10^{-5}
HOMA-IR (insulin derived), excluding exogenous users[a,c] CCI-all education Usual Care CCI-all vs. usual care	157 42	8.8(5.6) 9.4(8.3)	1.0-35.2 1.3-41.5	156 28	4.6(3.5) 13.2(14.2)	0.7-18.8 1.5-51.7	143 22	6.0(10.3) 8.4(7.6)	0.2-118.0 1.2-34.0	0.003 0.24 0.01
HOMA-IR (C-peptide derived), all[a,c] CCI-all education Usual Care CCI-all vs. usual care	244 78	11.7(7.4) 11.1(7.6)	0.04-66.7 0.6-45.5	190 60	8.1(4.4) 12.5(10.7)	0.05-32.3 0.6-66.7	164 55	8.0(4.2) 12.6(19.5)	0.03-27.8 0.5-142.9	5.4×10^{-14} 0.60 0.02
Metabolic and Body Composition										
Weight-clinic (kgs)[a] CCI-all education Usual Care CCI-all vs. usual care	257 83	116.5(25.9) 105.6(22.1)	63.4-215.6 71.0-170.6	187 73	101.1(22.2) 109.3(24.5)	55.4-166.7 74.6-172.8	147 53	102.5(21.9) 110.5(25.2)	58.5-181.0 71.2-166.5	4.6×10^{-26} 0.35 2.7×10^{-5}
Spine bone mineral density (g/cm^2)[a] CCI-all education	238	1.2(0.2)	0.8-1.8	195	1.2(0.2)	0.9-1.7	167	1.2(0.2)	0.8-1.8	0.01
Central abdominal fat (kg)[a] CCI-all education	237	5.8(1.7)	1.9-10.8	195	4.6(1.7)	1.3-9.7	167	4.9(1.7)	1.5-10.1	1.9×10^{-22}
Android: gynoid ratio[a] CCI-all education	238	1.3(0.3)	0.7-2.5	195	1.2(0.3)	0.7-2.3	167	1.2(0.3)	0.7-2.4	1.6×10^{-6}
Lean leg mass (kg)[a] CCI-all education	238	18.5(4.1)	10.3-30.1	195	17.6(4.4)	10.6-33.7	167	17.3(4.2)	10.4-34.6	1.2×10^{-23}
Cardiovascular										

Systolic blood pressure (mmHg)[a] CCI-all education Usual Care CCI-all vs. usual care	260 79	131.9(14.1) 129.8(13.6)	92.0-180.0 102.0-170.0	188 73	125.7(11.9) 129.1(15.3)	92.0-160.0 102.0-170.0	150 53	126.1(13.1) 129.9(11.1)	92.0-160.0 102.0-152.0	1.8×10^{-5} 0.92 0.03
Diastolic blood pressure (mmHg)[a] CCI-all education Usual Care CCI-all vs. usual care	260 79	82.1(8.3) 82.0(8.9)	60.0-110.0 62.0-110.0	188 72	78.0(7.5) 81.3(9.5)	56.0-100.0 48.0-100.0	150 53	78.7(8.0) 81.7(7.2)	60.0-100.0 62.0-96.0	1.5×10^{-4} 0.95 0.01
Total cholesterol (mg/dL)[a] CCI-all education Usual Care CCI-all vs. usual care	247 79	183.6(41.2) 183.8(45.8)	97.0-349.0 91.0-339.0	196 63	190.2(45.1) 180.2(61.1)	105.0-320.0 94.0-404.0	171 56	193.4(43.6) 181.8(57.0)	106.0-320.0 102.0-430.0	0.004 0.82 0.13
LDL-cholesterol (mg/dL)[a] CCI-all education Usual Care CCI-all vs. usual care	232 70	102.5(32.9) 101.5(36.2)	29.0-211.0 29.0-204.0	188 53	112.3(38.3) 89.3(29.5)	30.0-240.0 29.0-159.0	162 50	114.7(38.4) 93.9(32.3)	36.0-231.0 36.0-165.0	9.4×10^{-5} 0.12 7.4×10^{-4}
HDL-cholesterol (mg/dL)[a] CCI-all education Usual Care CCI-all vs. usual care	247 79	42.2(13.4) 37.6(11.2)	12.0-117.0 15.0-66.0	196 63	50.1(15.9) 35.9(12.3)	15.0-111.0 13.0-77.0	170 56	51.1(15.8) 42.3(10.3)	23.0-96.0 21.0-65.0	2.8×10^{-15} 0.11 0.02
Triglycerides (mg/dL)[a,d] CCI-all education Usual Care CCI-all vs. usual care	247 79	197.2(143.4) 282.9(401.2)	46.0-1432.0 84.0-2781.0	196 63	148.9(141.8) 314.5(487.7)	41.0-1308.0 78.0-3639.0	170 56	153.3(135.5) 209.5(138.7)	42.0-1356.0 74.0-708.0	9.2×10^{-9} 0.80 0.01

Liver										
ALT (Units/L[1])[a,c] CCI-all education Usual Care CCI-all vs. usual care	257 86	30.7(22.8) 27.7(19.8)	7.0-258.0 8.0-153.0	205 75	21.8(11.7) 28.3(20.3)	7.0-111.0 7.0-103.0	179 66	22.5(11.5) 28.9(19.1)	7.0-99.0 7.0-112.0	2.0×10^{-9} 0.44 0.05
AST (Units/L)[a,c] CCI-all education Usual Care CCI-all vs. usual care	257 86	23.7(15.2) 23.9(19.4)	7.0-130.0 9.0-156.0	205 74	19.1(6.9) 24.6(16.2)	8.0-73.0 10.0-120.0	178 66	19.5(6.3) 24.9(14.8)	10.0-59.0 12.0-79.0	2.0×10^{-4} 0.15 0.005
ALP (Units/L)[a] CCI-all education Usual Care CCI-all vs. usual care	256 86	74.1(22.1) 77.4(26.3)	25.0-172.0 25.0-154.0	205 74	64.8(21.2) 78.7(26.7)	27.0-174.0 35.0-169.0	178 66	64.0(19.6) 81.5(31.1)	28.0-160.0 32.0-179.0	1.2×10^{-14} 0.08 3.5×10^{-7}
Bilirubin (mg/dL)[a,c] CCI-all education Usual Care CCI-all vs. usual care	256 86	0.5(0.2) 0.6(0.3)	0.2-1.6 0.2-1.5	205 74	0.5(0.2) 0.6(0.3)	0.2-2.1 0.2-1.7	178 66	0.5(0.3) 0.6(0.4)	0.2-2.3 0.2-2.5	0.39 0.14 0.72
NAFLD-Liver fat score[a,c] CCI-all education Usual Care CCI-all vs. usual care	243 74	3.4(3.8) 3.1(3.6)	-2.6-30.9 -2.0-16.0	184 59	1.5(3.9) 4.6(5.4)	-1.9-42.8 -1.0-30.7	142 44	0.9(4.3) 2.7(3.3)	-3.4-45.3 -1.2-16.4	1.1×10^{-20} 0.10 1.5×10^{-4}
NAFLD-Fibrosis score[a] CCI-all education Usual Care CCI-all vs. usual care	238 75	-0.2(1.4) -0.8(1.4)	-4.0-5.1 -4.6-2.1	173 60	-0.8(1.1) -0.4(1.5)	-3.3-2.7 -4.6-2.3	132 40	-0.7(1.2) -0.2(1.4)	-3.8-4.7 -4.7-2.4	1.1×10^{-10} 0.13 1.7×10^{-4}
Kidney										

Anion gap (mmol L^{-1})[a] CCI-all education Usual Care CCI-all vs. usual care	257 86	6.8(1.7) 6.9(1.8)	2.0-12.0 3.0-12.0	205 76	7.1(1.8) 7.8(1.9)	2.0-12.0 4.0-13.0	179 66	7.2(1.6) 7.7(1.9)	3.0-12.0 4.0-13.0	4.9×10^{-4} 1.8×10^{-4} 0.08
BUN (mg/dL)[a,c] CCI-all education Usual Care CCI-all vs. usual care	258 86	16.9(6.6) 16.1(6.2)	7.0-70.0 5.0-36.0	205 76	19.0(7.8) 16.0(5.8)	8.0-86.0 6.0-44.0	179 67	17.8(6.6) 16.4(6.8)	7.0-57.0 6.0-49.0	0.05 0.86 0.15
eGFR (mL s^{-1} m^{-2})[a] CCI-all education Usual Care CCI-all vs. usual care	258 86	80.5(13.6) 79.2(13.7)	26.0-90.0 33.0-90.0	205 76	82.7(12.0) 80.1(13.0)	31.0-90.0 29.0-90.0	178 66	83.0(11.4) 79.1(14.9)	40.0-90.0 21.0-90.0	9.9×10^{-4} 0.84 0.02
Serum creatinine (mg/dL)[a,c] CCI-all education Usual Care CCI-all vs. usual care	258 86	0.9(0.2) 0.9(0.2)	0.5-2.2 0.5-2.2	205 76	0.8(0.2) 0.9(0.2)	0.4-1.9 0.5-1.9	179 66	0.8(0.2) 0.9(0.4)	0.5-1.8 0.6-3.2	0.004 0.76 0.15
Uric acid (mg/dL)[a] CCI-all education Usual Care CCI-all vs. usual care	261 85	5.9(1.5) 5.6(1.5)	2.7-10.2 2.9-10.5	203 72	5.9(1.5) 5.4(1.4)	1.7-10.5 2.9-9.0	179 55	5.8(1.5) 5.0(1.2)	2.9-10.1 2.6-8.0	0.19 0.003 0.002
Thyroid										
TSH (mIU L^{-1})[a,c] CCI-all education Usual Care CCI-all vs. usual care	259 86	2.3(1.7) 3.8(17.1)	0.03-15.3 0.03-159.9	203 74	1.9(1.1) 4.8(23.9)	0.02-8.1 0.1-207.8	179 60	2.0(1.2) 2.9(6.2)	0.2-10.9 0.03-49.3	0.08 0.79 0.31

Free T4 (ng/dL)[a,c] CCI-all education Usual Care CCI-all vs. usual care	260 86	0.9(0.2) 0.9(0.3)	0.6-1.9 0.4-3.0	203 73	0.9(0.2) 0.9(0.2)	0.6-1.8 0.2-1.8	179 57	0.9(0.2) 0.9(0.3)	0.6-1.8 0.6-2.8	0.34 0.03 0.47
Other										
Beta-hydroxybutyrate (mmol L^{-1})[a,c] CCI-all education Usual Care CCI-all vs. usual care	248 79	0.2(0.2) 0.2(0.1)	0.04-1.1 0.05-0.7	196 63	0.3(0.3) 0.2(0.2)	0.04-2.3 0.04-1.5	170 55	0.3(0.4) 0.2(0.3)	0.05-2.7 0.04-1.4	1.1×10^{-5} 0.17 0.09
hsC-reactive protein (nmol L^{-1})[a,c] CCI-all education Usual Care CCI-all vs. usual care	249 85	8.5(14.5) 8.9(8.6)	0.5-207.5 0.4-35.6	203 71	5.6(6.9) 10.4(14.6)	0.2-42.4 0.3-103.5	179 55	6.1(9.7) 8.3(8.5)	0.2-87.4 0.4-30.7	1.6×10^{-12} 0.30 0.001
White blood cell (k/cumm)[a] CCI-all education Usual Care CCI-all vs. usual care	260 86	7.2(1.9) 8.1(2.4)	3.5-13.3 3.6-14.7	205 75	6.5(1.8) 8.2(2.4)	2.7-13.0 2.9-13.8	180 60	6.6(2.0) 8.0(2.6)	2.4-14.5 4.1-19.3	9.0×10^{-5} 0.85 8.0×10^{-5}
Diabetes Medication										
Any diabetes medication, excluding metformin (%)[b] CCI-all education Usual Care	262 87	56.9±3.1 66.7±5.1	—	218 78	28.0±3.1 75.6±4.9	—	194 58	26.8±3.2 79.3±5.4	—	1.3×10^{-11} 0.004
Sulfonylurea (%)[b] CCI-all education	262	23.7±2.6	—	218	00.0±0.0	—	194	00.0±0.0	—	4.2×10^{-12}

Usual Care	87	24.1±4.6		78	25.6±5.0		58	29.3±6.0		0.23
Insulin (%)[b]										
CCI-all education	262	29.8±2.8	—	218	14.7±2.4	—	194	11.3±2.3	—	9.1×10^{-9}
Usual Care	87	46.0±5.4		78	51.3±5.7		58	55.2±6.6		0.23
Thiazolidinedione (%)[b]										
CCI-all education	262	1.5±0.8	—	218	0.5±0.5	—	194	2.6±1.1	—	0.73
Usual Care	87	1.2±1.2		78	1.3±1.3		58	6.9±3.4		0.25
SGLT-2 (%)[b]										
CCI-all education	262	10.3±1.9	—	218	0.9±0.7	—	194	3.1±1.3	—	0.01
Usual Care	87	14.9±3.8		78	16.7±4.3		58	13.8±4.6		0.69
DPP-4 (%)[b]										
CCI-all education	262	9.9±1.9	—	218	6.4±1.7	—	194	6.7±1.8	—	0.42
Usual Care	87	8.1±2.9		78	11.5±3.6		58	8.6±3.7		0.99
GLP-1 (%)[b]										
CCI-all education	262	13.4±2.1	—	218	15.1±2.4	—	194	10.8±2.2	—	0.42
Usual Care	87	16.1±4.0		78	20.5±4.6		58	27.6±5.9		0.18
Metformin (%)[b]										
CCI-all education	262	71.4±2.8	—	218	64.2±3.3	—	194	63.9±3.5	—	0.05
Usual Care	87	60.9±5.3		78	60.3±5.6		58	63.8±6.4		0.18

Note. All means and standard deviations or standard errors are without any adjustments and include all available data for the time point. Abbreviations: SD, standard deviation; CCI, continuous care intervention; UC, usual care; HOMA-IR, homeostatic model assessment of insulin resistance; LDL, low-density lipoprotein; HDL, high-density lipoprotein; ALT, alanine aminotransferase; AST, aspartate aminotransferase; ALP, alkaline phosphatase; NAFLD, nonalcoholic fatty liver disease; BUN, blood urea nitrogen; eGFR, estimated glomerular filtration rates; TSH, thyroid stimulating hormone; SGLT-2, Sodium glucose co-transporter 2 inhibitor; DPP-4, Dipeptidyl peptidase-4 inhibitor; GLP-1, Glucagon-like peptide 1 receptor agonist.

[a]P-values representing changes from baseline to 2 years and between group-differences at 2 years were obtained from linear mixed-effects models. Covariates in the model included baseline age, sex, race, body mass index, and insulin use. Only participants with both baseline and 2 year data for the outcome were included in the analysis.
[b]P-values representing changes in the proportions of participants taking medication from baseline to 2 years were obtained from McNemar's tests, with continuity correction when appropriate. Only participants with both baseline and 2 year data for the medication were included in the analysis.
[c]Variable was positively skewed and after removing the top 1% of values, skew and kurtosis values fell within acceptable ranges. Analyses were conducted on data excluding the top 1% of values for each variable.
[d]Variable was positively skewed and a natural log transformation was performed. The linear mixed-effects model analysis including covariates was conducted on the transformed variable.

Supplementary Table 4.

Disease outcomes in CCI and UC participants after 2 years (Intent-to-treat analysis with imputation)

Disease Outcomes	Continuous Care Intervention (n=262)			Usual Care (n=87)			Between group
	Baseline	2 Years	P	Baseline	2 Years	P	P
Diabetes Reversal (%)	12.1±2.0	53.5±3.4	$<0.0x10^{-36}$	16.4±4.5	9.3±3.9	0.04	$<0.0x10^{-36}$
Diabetes Remission (%)[a]	—	17.6±2.5	—	—	2.4±1.7	—	$5.1x10^{-9}$
Complete Remission (%)	—	6.7±1.6	—	—	0.0±0.0	—	$1.1x10^{-5}$
Metabolic Syndrome (%)	89.1±2.0	61.9±4.0	$4.9x10^{-15}$	92.4±3.3	85.9±5.1	0.24	$4.7x10^{-7}$
Suspected Steatosis (%)	95.8±1.4	67.4±4.2	$<0.0x10^{-36}$	94.7±3.0	89.0±5.1	0.16	$2.5x10^{-7}$
Absence of Fibrosis (%)	18.3±2.5	30.8±4.0	$1.4x10^{-5}$	24.9±5.4	15.9±5.8	0.08	$4x10^{-3}$

Note. Percentages and standard errors are provided. Estimates were obtained from generalized estimating equation models which provide adjusted proportions, controlling for baseline age, sex, race, time since diagnosis, body mass index, and insulin use. Multiple imputation was used to replace missing values, facilitating intent-to-treat analyses. A significance level of $P<0.0012$ ensures overall simultaneous significance of $P < 0.05$ over the 43 study variables using Bonferroni correction.
[a]Diabetes remission includes both partial and complete remission.

Supplementary Table 5.
Disease outcomes in CCI and UC participants after 2 years (Completers-only analysis)

Disease Outcomes	Continuous Care Intervention					Usual Care (n=87)					Between group
	N	Baseline	N	2 Years	P	N	Baseline	N	2 Years	P	P
Diabetes Reversal (%)	262	12.2±2.0	181	54.7±3.7	$<0.0 \times 10^{-36}$	87	20.7±4.4	57	10.5±4.1	0.07	5.4×10^{-15}
Diabetes Remission (%)[a]	—	—	208	18.8±2.7	—	—	—	79	2.5±1.8	—	1.6×10^{-8}
Complete Remission (%)	—	—	210	6.7±1.7	—	—	—	81	0.0±0.0	—	1.1×10^{-4}
Metabolic Syndrome (%)	262	88.6±2.0	154	63.0±3.9	9.9×10^{-11}	81	91.4±3.1	54	87.0±4.6	0.51	8.9×10^{-5}
Suspected Steatosis (%)	243	96.3±1.2	142	67.6±3.9	7.7×10^{-13}	74	94.6±2.6	44	88.6±4.8	0.40	3.9×10^{-5}
Absence of Fibrosis (%)	238	18.1±2.5	132	29.6±4.0	0.003	75	28.0±5.2	40	17.5±6.1	0.58	0.09

Note. All percentages and standard errors are without any adjustments and include all available data for the time point. P-values representing within-group changes from baseline to 2 years and between-group differences at 2 years were obtained from generalized estimating equation models. Covariates in the model included baseline age, sex, race, time since diagnosis, body mass index, and insulin use. Only participants with both baseline and 2 year data for the outcome were included in the analysis. A significance level of $P<0.0012$ ensures overall simultaneous significance of $P < 0.05$ over the 43 study variables using Bonferroni correction.
[a]Diabetes remission includes both partial and complete remission.

Supplementary Figures Legend

Supplementary Figure 1. Adjusted mean changes (CCI versus UC) from baseline to 2-years in (A) HbA1c, (B) Fasting insulin, (C) Weight.

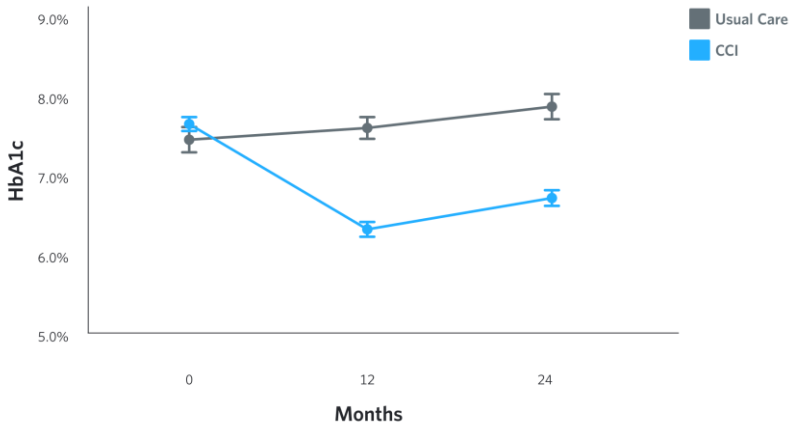
Supplementary Figure 2. Stratification of participants based on weight change (%) categories in each intervention groups, UC and CCI, among completers. Category <5% includes participants with weight gain.

Supplementary Figure 3. Adjusted mean changes (CCI versus UC) from baseline to 2-years in (A) Systolic Blood Pressure, (B) Diastolic Blood Pressure, (C) Alanine aminotransferase (ALT), and (D) High sensitive C-reactive protein (hsCRP).

Supplementary Figure 4. Cumulative relative frequency (%) of percentage participants reporting BHB $\geq$ 0.5mM at first, second and both years of the study. The differences in the distribution of participants reporting BHB $\geq$ 0.5mM between one and two years are illustrated in the figure.

Supplementary Figure 1

a



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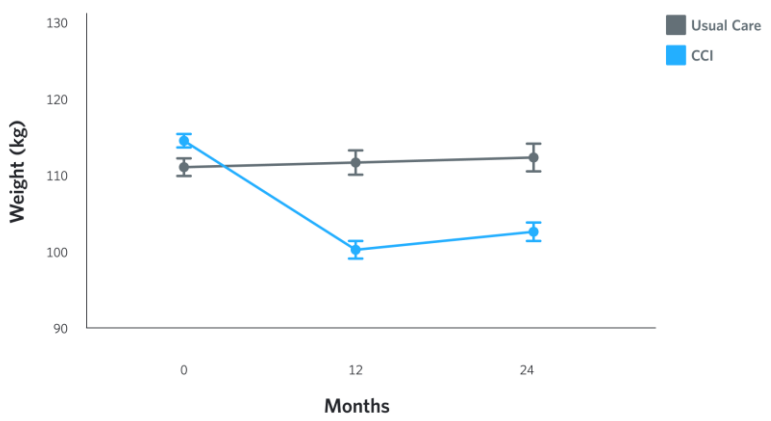

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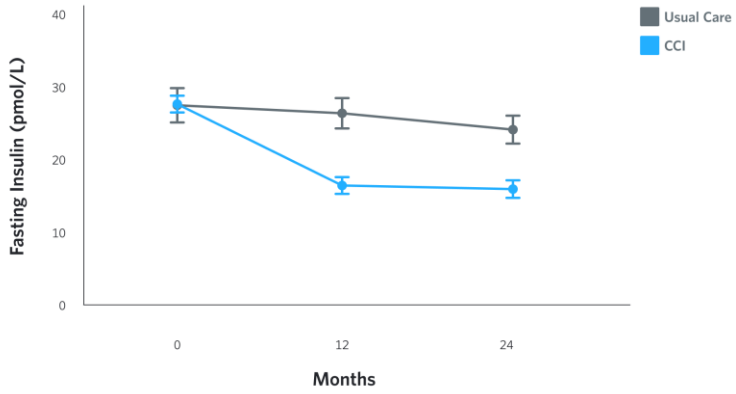
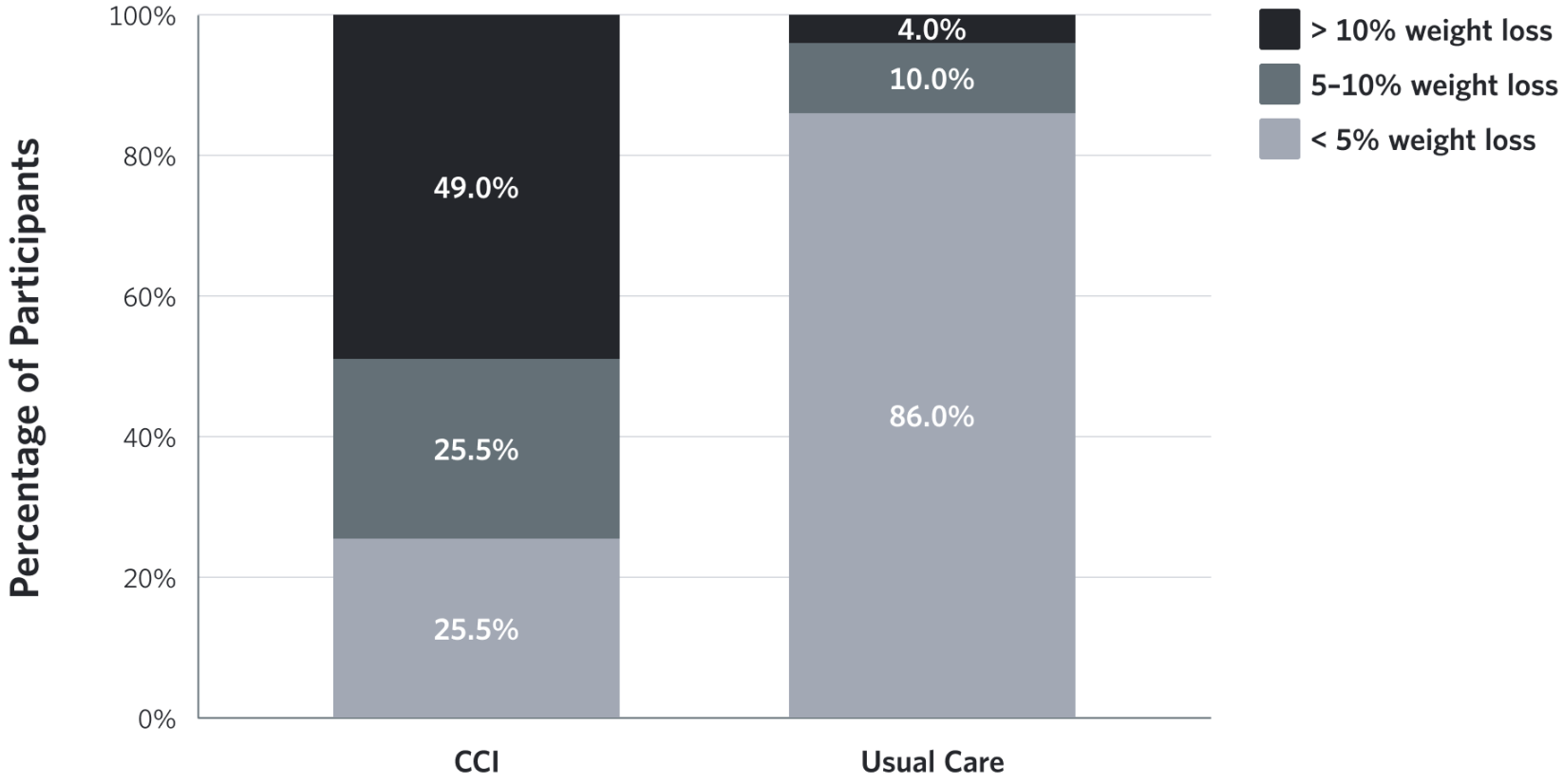
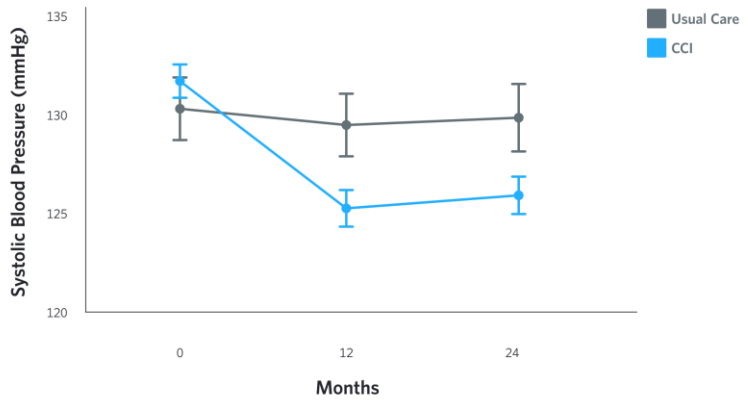


Supplementary Figure 2



Supplementary Figure 3

a



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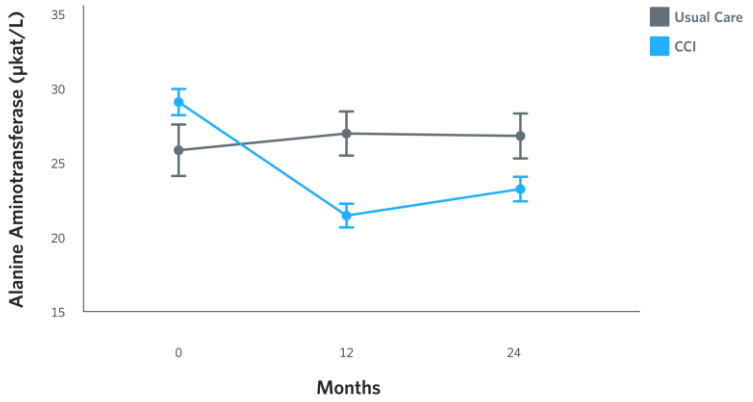

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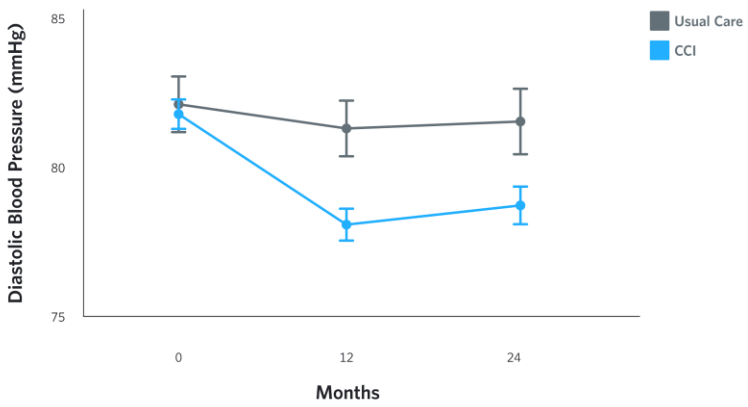

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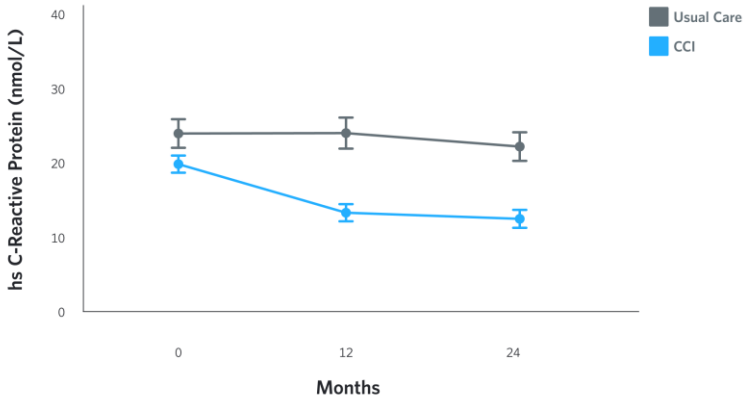
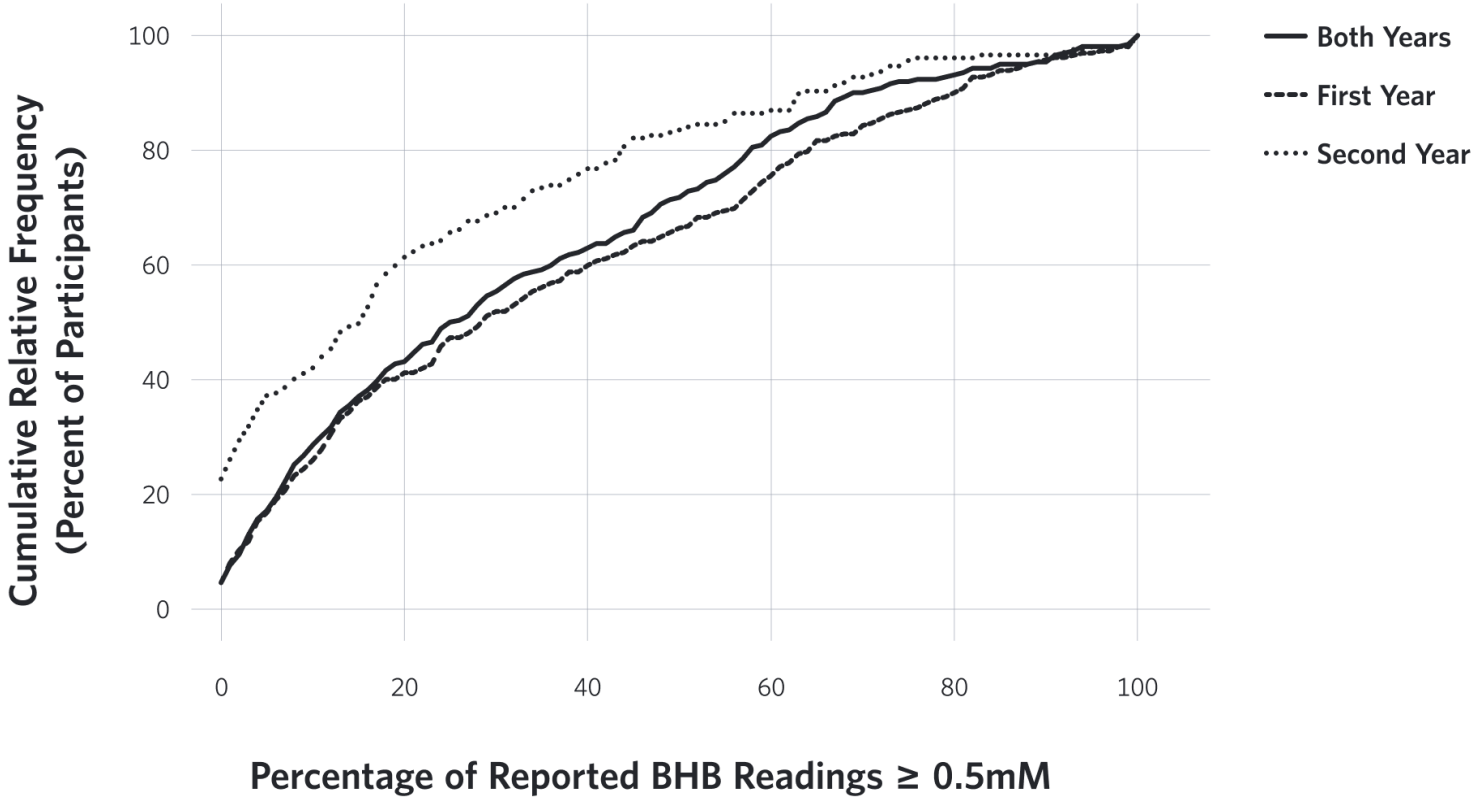


Supplementary Figure 4



Supplementary References (S)

1. Buse JB, Caprio S, Cefalu WT, Ceriello A, Del Prato S, Inzucchi SE, et al. How do we define cure of diabetes? ADA Consensus Statement. Diabetes Care (2009) 32: 2133-2135.
2. International Diabetes Federation (IDF). The IDF consensus worldwide definition of the metabolic syndrome. IDF Communications (2006) 1-24.
3. Huang PL. A comprehensive definition for metabolic syndrome. Dis Model Mech (2009) 2: 231-237.
4. Kotronen A, Peltonen M, Hakkarainen A, Sevastianova K, Bergholm R, Johansson LM, et al. Prediction of non-alcoholic fatty liver disease and liver fat using metabolic and genetic factors. Gastroenterology (2009) 137: 865-872.
5. Angulo P, Hui JM, Marchesini G, Bugianesi E, George J, Farrell GC, et al. The NAFLD fibrosis score: a noninvasive system that identifies liver fibrosis in patients with NAFLD. Hepatology (2007) 45: 846-854.

TREND Statement Checklist

Paper Section/Topic	Item No.	Descriptor	Reported? √	Reported? Pg #
TITLE and ABSTRACT				
Title and Abstract	1	● Information on how units were allocated to interventions		3
		● Structured abstract recommended		3
		● Information on target population or study sample		3
INTRODUCTION				
Background	2	● Scientific background and explanation of rationale		5-6
		● Theories used in designing behavioral interventions		N/A
METHODS				
Participants	3	● Eligibility criteria for participants, including criteria at different levels in recruitment/sampling plan (e.g., cities, clinics, subjects)		7,8
		● Method of recruitment (e.g., referral, self-selection), including the sampling method if a systematic sampling plan was implemented		7,8
		● Recruitment setting		7,8
		● Settings and locations where the data were collected		7,8
Interventions	4	● Details of the interventions intended for each study condition and how and when they were actually administered, specifically including:		7,8, ref 10
		○ Content: what was given?		7,8, ref 10
		○ Delivery method: how was the content given?		7,8, ref 10
		○ Unit of delivery: how were subjects grouped during delivery?		7,8, ref 10
		○ Deliverer: who delivered the intervention?		7,8, ref 10
		○ Setting: where was the intervention delivered?		7,8, ref 10
		○ Exposure quantity and duration: how many sessions or episodes or events were intended to be delivered? How long were they intended to last?		7,8, ref 10
		○ Time span: how long was it intended to take to deliver the intervention to each unit?		7,8, ref 10
		○ Activities to increase compliance or adherence (e.g., incentives)		7,8, ref 10
Objectives	5	● Specific objectives and hypotheses		6,9
Outcomes	6	● Clearly defined primary and secondary outcome measures		6,9
		● Methods used to collect data and any methods used to enhance the quality of measurements		6,9

		● Information on validated instruments such as psychometric and biometric properties		N/A
Sample size	7	● How sample size was determined and, when applicable, explanation of any interim analyses and stopping rules		N/A
Assignment method	8	● Unit of assignment (the unit being assigned to study condition, e.g., individual, group, community)		7,8, ref 10
		● Method used to assign units to study conditions, including details of any restriction (e.g., blocking, stratification, minimization)		7,8, ref 10
		● Inclusion of aspects employed to help minimize potential bias induced due to non-randomization (e.g., matching)		7,8, ref 10
Blinding (masking)	9	● Whether or not participants, those administering the interventions, and those assessing the outcomes were blinded to study condition assignment; if so, statement regarding how the blinding was accomplished and how it was assessed		N/A
Unit of Analysis	10	● Description of the smallest unit that is being analysed to assess intervention effects (e.g., individual, group, or community)		7,8, ref 10
		● If the unit of analysis differs from the unit of assignment, the analytical method used to account for this (e.g., adjusting the standard error estimates by the design effect or using multilevel analysis)		7,8, ref 10
Statistical methods	11	● Statistical methods used to compare study groups for primary methods outcome(s), including complex methods for correlated data		11-13
		● Statistical methods used for additional analyses, such as subgroup analyses and adjusted analysis		11-13
		● Methods for imputing missing data, if used		11-13
		● Statistical software or programs used		11-13
RESULTS				
Participant flow	12	● Flow of participants through each stage of the study: enrollment, assignment, allocation and intervention exposure, follow-up, analysis (a diagram is strongly recommended)		13, Figure 1
		○ Enrollment: the numbers of participants screened for eligibility, found to be eligible or not eligible, declined to be enrolled, and enrolled in the study		13, Figure 1
		○ Assignment: the numbers of participants assigned to a study condition		13, Figure 1
		○ Allocation and intervention exposure: the number of participants assigned to each study condition and the number of participants who received each intervention		13, Figure 1
		○ Follow-up: the number of participants who completed the follow-up or did not complete the follow-up (i.e., lost to follow-up), by study condition		13, Figure 1
		○ Analysis: the number of participants included in or excluded from the main analysis, by study condition		13, Figure 1
		● Description of protocol deviations from study as planned, along with reasons		13, Figure 1
Recruitment	13	● Dates defining the periods of recruitment and follow-up		13
Baseline data	14	● Baseline demographic and clinical characteristics of participants in each study condition		13, Table 1
		● Baseline characteristics for each study condition relevant to specific disease prevention research		N/A
		● Baseline comparisons of those lost to follow-up and those retained, overall and by study condition		13, Table 1

		● Comparison between study population at baseline and target population of interest		N/A
Baseline equivalence	15	● Data on study group equivalence at baseline and statistical methods used to control for baseline differences		Table 1, 11-13
Numbers analyzed	16	● Number of participants (denominator) included in each analysis for each study condition, particularly when the denominators change for different outcomes; statement of the results in absolute numbers when feasible		Table 2, 14-18
		● Indication of whether the analysis strategy was "intention to treat" or, if not, description of how non-compliers were treated in the analyses		Table 2, 14-18
Outcomes and estimation	17	● For each primary and secondary outcome, a summary of results for each estimation study condition, and the estimated effect size and a confidence interval to indicate the precision		Table 2, 14-18
		● Inclusion of null and negative findings		Table 2, 14-18
		● Inclusion of results from testing pre-specified causal pathways through which the intervention was intended to operate, if any		N/A
Ancillary analyses	18	● Summary of other analyses performed, including subgroup or restricted analyses, indicating which are pre-specified or exploratory		14-18, Suppl. Mat
Adverse events	19	● Summary of all important adverse events or unintended effects in each study condition (including summary measures, effect size estimates, and confidence intervals)		17,18
DISCUSSION				
Interpretation	20	● Interpretation of the results, taking into account study hypotheses, sources of potential bias, imprecision of measures, multiplicative analyses, and other limitations or weaknesses of the study		19-24
		● Discussion of results taking into account the mechanism by which the intervention was intended to work (causal pathways) or alternative mechanisms or explanations		19-24
		● Discussion of the success of and barriers to implementing the intervention, fidelity of implementation		19-24
		● Discussion of research, programmatic, or policy implications		19-24
Generalizability	21	● Generalizability (external validity) of the trial findings, taking into account the study population, the characteristics of the intervention, length of follow-up, incentives, compliance rates, specific sites/settings involved in the study, and other contextual issues		19-24
Overall evidence	22	● General interpretation of the results in the context of current evidence and current theory		19-24

From: Des Jarlais, D. C., Lyles, C., Crepaz, N., & the Trend Group (2004). Improving the reporting quality of nonrandomized evaluations of behavioral and public health interventions: The TREND statement. *American Journal of Public Health*, 94, 361-366. For more information, visit: http://www.cdc.gov/trendstatement/