A Online Appendix: Additional results

Figure A.1: Disease burden in low- and middle-income countries at ages 50–69: Disability adjusted live years (DALYs) lost due to major non-communicable and communicable diseases, and injuries



Notes: The area of each square is proportional to the contribution of a specific disease categories to the overall DALYs lost in a population due to mortality and morbidity. *Non-communicable diseases* (blue): CVD = Cardiovascular Diseases, Neoplasms = Neoplasms and malignant cancers, MSK = Musculoskeletal disorders, Mental = Mental disorders, Chr Resp = Chronic respiratory diseases, Neuro = Neurological disorders, Digestive = Neurological disorders, Sense = Sense organ diseases, Oth NCD = Other non-communicable diseases, Diabetes+CKD = Diabetes and kidney diseases, Subs Use = Substance use disorders, Skin = Skin and subcutaneous diseases. *Communicable diseases* (red): Resp+TB = Respiratory infections and tuberculosis, Enteric Infect = Enteric infections, HIV/AIDS+STIs = HIV/AIDS and sexually transmitted infections, NTD+Malaria = Neglected tropical diseases and malaria Nutr Def = Nutritional deficiencies Other + Diseases = Other infectious disease. *Injuries* (green): Unint Inj = Unintentional injuries, Trans Inj = Transport injuries Self-harm & IPV = Self-harm and interpersonal violence. The disease burden further shifts to non-communicable diseases, including CVDs, at ages 70+.

Source: Obtained from the Global Burden of Disease Data Visualization Tool (https://vizhub.healthdata.org/gbd-compare/), accessed February 25, 2020.

Figure A.2: Disease burden in sub-Saharan African countries at ages 50–69: Disability adjusted live years (DALYs) lost due to major non-communicable and communicable diseases, and injuries



Notes: The area of each square is proportional to the contribution of a specific disease categories to the overall DALYs lost in a population due to mortality and morbidity. *Non-communicable diseases* (blue): CVD = Cardiovascular Diseases, Neoplasms = Neoplasms and malignant cancers, MSK = Musculoskeletal disorders, Mental = Mental disorders, Chr Resp = Chronic respiratory diseases, Neuro = Neurological disorders, Digestive = Neurological disorders, Sense = Sense organ diseases, Oth NCD = Other non-communicable diseases, Diabetes+CKD = Diabetes and kidney diseases, Subs Use = Substance use disorders, Skin = Skin and subcutaneous diseases. *Communicable diseases* (red): Resp+TB = Respiratory infections and tuberculosis, Enteric Infect = Enteric infections, HIV/AIDS+STIs = HIV/AIDS and sexually transmitted infections, NTD+Malaria = Neglected tropical diseases and malaria Nutr Def = Nutritional deficiencies Other + Diseases = Other infectious disease. *Injuries* (green): Unint Inj = Unintentional injuries, Trans Inj = Transport injuries Self-harm & IPV = Self-harm and interpersonal violence. The disease burden further shifts to non-communicable diseases, including CVDs, at ages 70+.

Source: Obtained from the Global Burden of Disease Data Visualization Tool (https://vizhub.healthdata.org/gbd-compare/), accessed February 25, 2020.

Figure A.3: Maximum blood pressure measurement of respondents of the 2013 MLSFH survey



* Referred because of diastolic BP A Referred, mean systolic BP below 160

Notes: The graphs shows maximum of the three measures of systolic and diastolic blood pressure for respondents of the 2013 MLSFH-MAC survey. Dots represents maximum values of systolic (x-axis) and diastolic (y-axis) blood pressure. Small triangles represent individuals whose maximum systolic blood pressure is at least 160 but their mean systolic blood pressure is below 160. Small red *x* represent the individuals who were given a referral letter because their diastolic blood pressure is at least 110.

Figure A.4: Variability of the predicted mean systolic blood pressure collected over the day



Note: The figure represents the marginal effects of an increase in time (hours elapsed since midnight) on mean systolic blood pressure (in 2017), along their 95% confidence intervals (grey area). The sample used to derive this graph is the same as our study sample (MLSFH-MAC respondents). The fitted values are derived from a regression that controls for sex, age and a quartic polynomial in time. Note also that we discarded a few observations for which blood pressure was collected after 4pm.

Figure A.5: Effects of getting a referral letter on changes in systolic blood pressure (top left), changes in diastolic blood pressure (top middle), the probability of being hypertensive in 2017 (top right), hypertension diagnosis (bottom left) and hypertension medication (bottom right) at the cutoff.



Note: The graphs show average blood pressure outcomes conditional on the maximum systolic blood pressure in 2013. Individuals right of the vertical line received the referral card in 2013. The outcome in the top-left graph is the average change in systolic blood pressure from 2013 to 2017. The outcome in the top-middle graph is the average change in diastolic blood pressure from 2013 to 2017. In the top-right graph, we define someone as being hypertensive if the mean systolic or diastolic blood pressure measurements was greater or equal to 140 and 90, respectively. The outcome in the bottom-left graph is whether individuals got diagnosed by a medical professional in the last two years (2017 survey). The outcome in the bottom-right graph is whether individuals are currently taking medication (2017 survey). We employed Mean Square Error (MSE) optimal bandwidth selector and generated the plots above using 2nd order local-polynomial and triangular kernels. Bins are derived optimally using variance evenly-spaced method using spacing estimators (Calonico *et al.* 2014a,b, 2015, 2017). Each dot represents the means of the respective outcome in a given bin.

Specifications	Effects	Std. errors	P-values	OB-	OB+	N-	N+			
Ē	. Change i	n systolic blo	ood pressur	e						
Quadratic	-14.05^{**}	6.918	0.042	31.40	32.79	427	153			
Quadratic with controls -15.06**		7.015	0.032	26.95	34.31	343	154			
B. Change in diastolic blood pressure										
Quadratic	-5.951*	3.447	0.084	27.82	31.82	364	150			
Quadratic with controls	-4.701	3.539	0.184	21.55	31.44	275	148			
C. Probability of being hypertensive in 2017										
Quadratic	-0.195	0.143	0.173	28.02	25.88	373	127			
Quadratic with controls	-0.217	0.139	0.118	30.87	25.05	405	126			
		D. Diagnosis	3							
Quadratic	0.257**	0.129	0.047	22.27	21.88	294	117			
Quadratic with controls	0.221*	0.123	0.073	20.95	24.00	256	125			
E. Medication										
Quadratic	0.045	0.090	0.618	18.83	27.51	218	136			
Quadratic with controls	0.038	0.086	0.655	18.60	29.10	214	142			

Table A.1: Results of the RDD specification using 2nd order local polynomials

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. All these specifications use triangular weights. OB- and OB+ represent the optimal bandwidths below and above the cutoffs, respectively. N- and N+ represent the number of observations included in the optimal bandwidths below and above the cutoffs, respectively. The change in systolic and diastolic blood pressure is $mean(x_1, x_2, x_3)^{2017} - mean(x_1, x_2, x_3)^{2013}$ with $x = \{systolic, diastolic\}$. We use a Mean Square Error (MSE) optimal bandwidth selector.

Specification	Effects	Std. errors	P-values	OB-	OB+	N-	N+		
	A. Change	e in systolic b	lood pressi	ure					
Linear	-14.79^{**}	5.878	0.012	21.07	13.37	280	87		
Linear with controls	-15.09^{**}	6.026	0.012	18.04	14.38	214	90		
B. Change in diastolic blood pressure									
Linear	-7.055^{**}	3.119	0.024	16.57	12.03	192	83		
Linear with controls	-7.892**	3.083	0.011	13.80	13.23	148	86		
C. Probability of being hypertensive in 2017									
Linear	-0.190^{*}	0.110	0.085	18.82	16.79	218	102		
Linear with controls	-0.221^{**}	0.109	0.042	18.95	17.29	214	103		
		D. Diagnos	is						
Linear	0.256**	0.112	0.022	13.61	10.79	151	69		
Linear with controls	0.185^{*}	0.108	0.088	11.58	11.89	118	76		
E. Medication									
Linear	0.061	0.076	0.425	18.22	10.71	218	69		
Linear with controls	0.012	0.072	0.870	18.18	11.07	214	76		

Table A.2: Results of the RDD specification using rectangular weights

Note: The table shows estimates of the effect of receiving a referral card in 2013 on blood pressure related outcomes using a regression disconinuity design. Change in systolic blood pressure is the difference between the average of the three systolic blood pressure measures in 2017 and in 2013. Change in diastolic blood pressure is the difference between the average of the three diastolic blood pressure measures in 2017 and in 2013. We define someone as being hypertensive if the mean systolic or diastolic blood pressure measurements was greater or equal to 140 and 90, respectively. Diagnosis is a dummy equal to 1 if the respondent has been diagnosed by a medical professional in the last two years (2017 survey). Medication is a dummy equal to 1 if the respondent is currently taking medication for blood pressure (2017 survey). These specifications use rectangular weights instead of triangular ones. OB- and OB+ represent the optimal bandwidths below and above the cutoffs, respectively. The change in systolic and diastolic blood pressure is $mean(x_1, x_2, x_3)^{2017} - mean(x_1, x_2, x_3)^{2013}$ with $x = {systolic, diastolic}$. We use a Mean Square Error (MSE) optimal bandwidth selector. * p < 0.1, ** p < 0.05, *** p < 0.01.

Specifications	Effects	Std. errors	P-values	OB-	OB+	N-	N+		
	A. Change	e in systolic l	lood pressi	ure					
Linear	-13.04**	6.162	0.034	18.85	18.85	218	108		
Linear with controls	-14.24^{**}	6.039	0.018	19.04	19.04	229	108		
B. Change in diastolic blood pressure									
Linear	-5.697*	2.937	0.052	19.31	19.31	233	109		
Linear with controls	-5.777**	2.717	0.034	21.35	21.35	275	115		
C. Probability of being hypertensive in 2017									
Linear	-0.192*	0.106	0.070	23.22	23.22	312	122		
Linear with controls	-0.219**	0.105	0.037	23.18	23.18	307	121		
		D. Diagnos	sis						
Linear	0.236**	0.112	0.036	13.44	13.44	151	87		
Linear with controls	0.201^{*}	0.105	0.056	14.32	14.32	160	90		
E. Medication									
Linear	0.047	0.077	0.543	14.30	14.30	163	91		
Linear with controls	0.036	0.075	0.629	14.05	14.05	160	90		

Table A.3: Results of the RDD specification restricting the bandwidth to be the same bandwidths on both sides of the cutoffs

Note: The table shows estimates of the effect of receiving a referral card in 2013 on blood pressure related outcomes using a regression disconinuity design. Change in systolic blood pressure is the difference between the average of the three systolic blood pressure measures in 2017 and in 2013. Change in diastolic blood pressure is the difference between the average of the three diastolic blood pressure measures in 2017 and in 2013. We define someone as being hypertensive if the mean systolic or diastolic blood pressure measurements was greater or equal to 140 and 90, respectively. Diagnosis is a dummy equal to 1 if the respondent has been diagnosed by a medical professional in the last two years (2017 survey). Medication is a dummy equal to 1 if the respondent is currently taking medication for blood pressure (2017 survey). All these specifications use triangular weights. *OB*- and *OB*+ represent the bandwidths below and above the cutoffs, respectively, and are restricted to be identical. *N*- and *N*+ represent the number of observations included in the optimal bandwidths below and above the cutoffs, respectively. The change in systolic and diastolic blood pressure is *mean*(x_1, x_2, x_3)²⁰¹⁷ - *mean*(x_1, x_2, x_3)²⁰¹³ with $x = {systolic, diastolic}$. We use a Mean Square Error (MSE) optimal bandwidth selector. * p < 0.1, ** p < 0.05, *** p < 0.01.

Specifications	Effects	Std. errors	P-values	OB-	OB+	N-	N+		
	A. Change	e in systolic b	olood pressi	ure					
Linear	-12.88^{**}	5.947	0.030	23.57	18.43	312	108		
Linear with controls	-14.28^{**}	5.952	0.016	21.30	18.72	275	107		
B. Change in diastolic blood pressure									
Linear	-5.439^{*}	2.867	0.058	23.57	18.43	312	108		
Linear with controls	-6.029**	2.811	0.032	21.30	18.72	275	107		
C. Probability of being hypertensive in 2017									
Linear	-0.197^{*}	0.111	0.076	23.57	18.43	312	108		
Linear with controls	-0.228^{**}	0.112	0.042	21.30	18.76	275	107		
		D. Diagnos	sis						
Linear	0.225**	0.094	0.017	23.57	18.43	312	109		
Linear with controls	0.192**	0.091	0.035	21.30	18.72	275	108		
E. Medication									
Linear	0.063	0.066	0.339	23.57	18.43	312	109		
Linear with controls	0.042	0.064	0.515	21.30	18.72	275	108		

Table A.4: Results of the RDD specification using identical optimal bandwidths for all four main outcomes

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. These specifications use same optimal bandwidths for the four main outcome variables. OB- and OB+ represent the optimal bandwidths below and above the cutoffs, respectively. N- and N+ represent the number of observations included in the optimal bandwidths below and above the cutoffs, respectively. The change in systolic and diastolic blood pressure is $mean(x_1, x_2, x_3)^{2017} - mean(x_1, x_2, x_3)^{2013}$ with $x = {systolic, diastolic}$. We use a Mean Square Error (MSE) optimal bandwidth selector.

Specifications	Effects	Std. errors	P-values	OB-	OB+	N-	N+		
	A. Chang	e in systolic l	blood press	ure					
Linear	3.972	5.271	0.451	26.32	10.79	366	87		
Linear with controls	1.600	4.948	0.746	25.67	10.49	337	86		
B. Change in diastolic blood pressure									
Linear	-1.773	2.427	0.465	18.79	14.18	250	107		
Linear with controls	-4.309^{*}	2.368	0.069	14.88	14.84	172	106		
C. Probability of being hypertensive in 2017									
Linear	0.056	0.109	0.610	18.46	12.71	250	95		
Linear with controls	-0.003	0.105	0.980	20.16	13.12	277	98		
		D. Diagnos	sis						
Linear	0.029	0.062	0.634	24.33	15.83	334	113		
Linear with controls	0.014	0.062	0.827	23.26	16.15	313	116		
E. Medication									
Linear	0.004	0.044	0.935	20.92	15.85	282	113		
Linear with controls	-0.020	0.044	0.643	19.99	15.52	259	112		

Table A.5: Results of the RDD specification using the cutoff at 157 instead of 160

Note: The table shows estimates of the effect of receiving a referral card in 2013 on blood pressure related outcomes using a regression disconinuity design assuming the cutoff is at 157 instead of 160. Change in systolic blood pressure is the difference between the average of the three systolic blood pressure measures in 2017 and in 2013. Change in diastolic blood pressure is the difference between the average of the three diastolic blood pressure measures in 2017 and in 2013. Change in diastolic blood pressure is the difference between the average of the three diastolic blood pressure measures in 2017 and in 2013. We define someone as being hypertensive if the mean systolic or diastolic blood pressure measurements was greater or equal to 140 and 90, respectively. Diagnosis is a dummy equal to 1 if the respondent has been diagnosed by a medical professional in the last two years (2017 survey). Medication is a dummy equal to 1 if the respondent is currently taking medication for blood pressure (2017 survey). All these specifications use triangular weights. *OB*- and *OB*+ represent the bandwidths below and above the cutoffs, respectively, and are restricted to be identical. *N*- and *N*+ represent the number of observations included in the optimal bandwidths below and above the cutoffs, respectively. The change in systolic and diastolic blood pressure is *mean*(x_1, x_2, x_3)²⁰¹⁷ - *mean*(x_1, x_2, x_3)²⁰¹³ with $x = \{systolic, diastolic\}$. We use a Mean Square Error (MSE) optimal bandwidth selector. * p < 0.1, ** p < 0.05, *** p < 0.01.

Specifications	Effects	Std. errors	P-values	OB-	OB+	N-	N+		
	A. Chang	ge in systolic	blood press	sure					
Linear	2.368	7.274	0.745	14.45	18.55	143	94		
Linear with controls	5.811	7.912	0.463	12.79	18.21	115	94		
B. Change in diastolic blood pressure									
Linear	-3.758	3.345	0.261	18.30	18.41	198	94		
Linear with controls	-2.721	3.467	0.432	16.55	17.44	169	91		
C. Probability of being hypertensive in 2017									
Linear	0.031	0.146	0.829	13.95	23.04	126	108		
Linear with controls	0.141	0.153	0.357	11.67	21.44	110	103		
		D. Diagno	sis						
Linear	-0.046	0.142	0.744	13.27	15.37	126	87		
Linear with controls	0.061	0.136	0.652	14.05	13.04	139	80		
E. Medication									
Linear	-0.070	0.098	0.480	13.10	17.49	126	92		
Linear with controls	-0.037	0.093	0.691	13.48	17.21	124	92		

Table A.6: Results of the RDD specification using the cutoff at 163 instead of 160

Note: The table shows estimates of the effect of receiving a referral card in 2013 on blood pressure related outcomes using a regression disconinuity design assuming the cutoff is at 163 instead of 160. Change in systolic blood pressure is the difference between the average of the three systolic blood pressure measures in 2017 and in 2013. Change in diastolic blood pressure is the difference between the average of the three diastolic blood pressure measures in 2017 and in 2013. Change in diastolic blood pressure is the difference between the average of the three diastolic blood pressure measures in 2017 and in 2013. We define someone as being hypertensive if the mean systolic or diastolic blood pressure measurements was greater or equal to 140 and 90, respectively. Diagnosis is a dummy equal to 1 if the respondent has been diagnosed by a medical professional in the last two years (2017 survey). Medication is a dummy equal to 1 if the respondent is currently taking medication for blood pressure (2017 survey). All these specifications use triangular weights. OB- and OB+ represent the bandwidths below and above the cutoffs, respectively, and are restricted to be identical. N- and N+ represent the number of observations included in the optimal bandwidths below and above the cutoffs, respectively. The change in systolic and diastolic blood pressure is $mean(x_1, x_2, x_3)^{2017} - mean(x_1, x_2, x_3)^{2013}$ with $x = \{systolic, diastolic\}$. We use a Mean Square Error (MSE) optimal bandwidth selector. * p < 0.1, ** p < 0.05, *** p < 0.01.

Specification	Effects	Std. errors	P-values	OB-	OB+	N-	N+		
A. (Change we	ekly hours of	moderate a	activity					
Linear	-1.803	4.265	0.672	24.52	23.39	323	123		
Linear with controls	-1.947	4.331	0.653	23.33	22.74	306	120		
B. Change weekly hours of vigorous activity									
Linear	-7.931	4.900	0.106	11.16	14.52	119	90		
Linear with controls	-8.973^{*}	4.907	0.067	10.91	14.75	102	89		
C. Change in weight									
Linear	0.143	1.529	0.925	19.95	13.36	223	85		
Linear with controls	-0.048	1.530	0.975	19.79	13.94	223	85		
		D. Change in	BMI						
Linear	-0.401	0.588	0.495	18.52	14.22	209	88		
Linear with controls	-0.519	0.619	0.402	17.69	13.66	197	84		
E. Waist to hip ratio (2017)									
Linear	-0.017	0.016	0.298	19.17	19.39	226	108		
Linear with controls	-0.025	0.016	0.123	19.87	19.56	224	107		

Table A.7: Results of the RDD specification on the change in physical activity and weight

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. All these specification use triangular weights. OB- and OB+ represent the optimal bandwidths below and above the cutoffs, respectively. N- and N+ represent the number of observations included in the optimal bandwidths below and above the cutoffs, respectively. The change in systolic and diastolic blood pressure is $mean(x_1, x_2, x_3)^{2017} - mean(x_1, x_2, x_3)^{2013}$ with $x = \{systolic, diastolic\}$. We use a Mean Square Error (MSE) optimal bandwidth selector.

1. Regression Discontinuity Design								
	Effects	Std. errors	P-values	OB-	OB+	N-	N+	
		A. Mo	ortality					
Linear	0.019	0.082	0.814	18.37	14.92	252	106	
Linear with controls	0.057	0.078	0.466	21.09	14.59	318	106	
		B. At	trition					
Linear	0.000	0.045	0.996	31.67	17.30	445	106	
Linear with controls	0.010	0.044	0.817	29.77	16.71	414	104	
2. Matching Strategy								
	ATET	P-va	lue	Obs.		Average distance		
		A. Mo	ortality					
No controls	.013	.93	6	24	42		.871	
With controls	033	.59	3	24	42		.916	
With controls + SD	009	.88	3	24	42		1.538	
		B. At	trition					
No controls	.010	.66	6	2	18		.920	
With controls	.015	.71	0	21	18		.959	
With controls + SD	039	.33	4	22	18		1.575	

Table A.8: Causal effects on mortality and attrition

Note: The table shows the effect of the referral card given in 2013 on mortality and attrition in 2017. Specifications in the RDD use triangular weights. *OB*- and *OB*+ represent the optimal bandwidths below and above the cutoffs, respectively. *N*- and *N*+ represent the number of observations included in the optimal bandwidths below and above the cutoffs, respectively. We use a Mean Square Error (MSE) optimal bandwidth selector. * p < 0.1, ** p < 0.05, *** p < 0.01.

	Change in systolic blood pressure	Change in diastolic blood pressure	Prob. of being hy- pertensive (2017)	Diagnosis	Medication				
	1	A. At least 3	matches						
		No contr	rols						
ATET	-3.867	-1.316	113	.272***	.112**				
P-value	.685	.690	.313	.000	.032				
Obs.	207	207	207	207	207				
Average distance	.933	.933	.933	.933	.933				
With controls									
ATET	-9.471*	-1.628	078	.292***	.135***				
P-value	.089	.500	.439	.000	.009				
Obs.	204	204	204	204	204				
Average distance	.904	.904	.904	.904	.904				
With controls + SD									
ATET	-6.418	-2.750	290***	.257***	.162***				
P-value	.271	.272	.002	.002	.003				
Obs.	204	204	204	204	204				
Average distance	1.503	1.503	1.503	1.503	1.503				
		B. At least 5	matches						
		No conti	rols						
ATET	-8.164	-2.622	204	.289***	.123**				
P-value	.293	.375	.178	.000	.0150				
Obs.	207	207	207	207	207				
Average distance	1.228	1.228	1.228	1.228	1.228				
		With con	trols						
ATET	-10.39*	-2.416	126	.223***	.128**				
P-value	.051	.304	.197	.005	.018				
Obs.	204	204	204	204	204				
Average distance	1.057	1.057	1.057	1.057	1.057				
		With contro	ls + SD						
ATET	-12.18**	-4.995**	226**	.235***	.171***				
P-value	.028	.040	.021	.004	.002				
Obs.	204	204	204	204	204				
Average distance	1.665	1.665	1.665	1.665	1.665				

Table A.9: Results of the matching estimations on the main outcomes variables with different restrictions on the number of minimum matches

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. The results represent the Average Treatment Effects on Treated (ATET) of getting a referral card on the various outcomes listed in the columns. We restrict the number of matches to be at least 3 (Panel A) and 5 (Panel B) and match respondents based on their mean systolic blood pressure in 2013, limiting the distance for possible matches to be at most 10. "Distance" represent the mean of the average distances between each observation and their matches. "With controls" includes a sex dummy, age and region dummies. 57

	Change in	Change in	Prob. of	Diagnosis	Medication				
	systolic	diastolic	being hy-						
	blood	blood	pertensive						
	pressure	pressure	(2017)						
No controls									
ATET	-8.484	-2.817	196	.277***	.117**				
P-value	.321	.365	.171	.000	.023				
Obs.	237	237	237	237	237				
Average distance	1.21	1.21	1.21	1.21	1.21				
With controls									
ATET	-9.734*	-2.087	112	.228***	.128**				
P-value	.079	.391	.26	.003	.012				
Obs.	234	234	234	234	234				
Average distance	.935	.935	.935	.935	.935				
		With contro	ls + SD						
ATET	-9.01*	-4.027*	215**	.258***	.180***				
P-value	.098	.093	.024	.002	.001				
Obs.	234	234	234	234	234				
Average distance	1.54	1.54	1.54	1.54	1.54				

Table A.10: Results of the matching estimations on the main outcomes variables, restricting possible matches to be within a distance of 12 maximum

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. The results represent the Average Treatment Effects on Treated (ATET) of getting a referral card on the various outcomes listed in the columns. We restrict the number of matches to be at least 4 and match respondents based on their mean systolic blood pressure in 2013, limiting the distance for possible matches to be at most 8. "Distance" represent the mean of the average distances between each observation and their matches. "With controls" includes a sex dummy, age and region dummies.

	Change in	Change in	Prob. of	Diagnosis	Medication			
	systolic	diastolic	being hy-					
	blood	blood	pertensive					
	pressure	pressure	(2017)					
No controls								
ATET	-8.484	-2.817	196	.277***	.117**			
P-value	.321	.365	.171	.000	.023			
Obs.	181	181	181	181	181			
Average distance	1.21	1.21	1.21	1.21	1.21			
With controls								
ATET	-9.046	-1.769	100	.215***	.118**			
P-value	.101	.463	.309	.008	.026			
Obs.	178	178	178	178	178			
Average distance	1.055	1.055	1.055	1.055	1.055			
With controls + SD								
ATET	-7.386	-2.029	266***	.199**	.093*			
P-value	.206	.404	.006	.015	.077			
Obs.	178	178	178	178	178			
Average distance	1.659	1.659	1.659	1.659	1.659			

Table A.11: Results of the matching estimations on the main outcomes variables, restricting possible matches to be within a distance of 8 maximum

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. The results represent the Average Treatment Effects on Treated (ATET) of getting a referral card on the various outcomes listed in the columns. We restrict the number of matches to be at least 4 and match respondents based on their mean systolic blood pressure in 2013, limiting the distance for possible matches to be at most 8. "Distance" represent the mean of the average distances between each observation and their matches. "With controls" includes a sex dummy, age and region dummies.

	Change in systolic blood pressure	Change in diastolic blood pressure	Prob. of being hy- pertensive (2017)	Diagnosis	Medication				
No controls									
ATET	-9.440	-2.960	216	.253***	.079*				
P-value	.299	.367	.156	.001	.089				
Obs.	106	106	106	106	106				
Average distance	1.275	1.275	1.275	1.275	1.275				
With controls									
ATET	-6.068	024	049	.260***	.115**				
P-value	.301	.992	.648	.003	.0250				
Obs.	105	105	105	105	105				
Average distance	1.38	1.38	1.38	1.38	1.38				
With controls + SD									
ATET	-10.66*	-2.107	313***	.234***	.120**				
P-value	.057	.401	.001	.0090	.023				
Obs.	105	105	105	105	105				
Average distance	1.978	1.978	1.978	1.978	1.978				

Table A.12: Results of the matching estimations on the main outcomes variables, restricting possible matches to be within a distance of 5 maximum

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. The results represent the Average Treatment Effects on Treated (ATET) of getting a referral card on the various outcomes listed in the columns. We restrict the number of matches to be at least 4 and match respondents based on their mean systolic blood pressure in 2013, limiting the distance for possible matches to be at most 5. "Distance" represent the mean of the average distances between each observation and their matches. "With controls" includes a sex dummy, age and region dummies.

	Change in systolic blood pressure	Change in diastolic blood pressure	Prob. of being hy- pertensive (2017)	Diagnosis	Medication	
No controls						
ATET	-6.109	-3.058	121	.289***	.119**	
P-value	.325	.223	.161	.000	.027	
Obs.	256	256	256	257	257	
Average distance	.726	.726	.726	.773	.773	
With controls						
ATET	-9.530*	-3.590	087	.209**	.095*	
P-value	.087	.119	.343	.011	.096	
Obs.	253	253	253	254	254	
Average distance	.797	.797	.796	.796	.796	
With controls + SD						
ATET	-8.729	-6.783***	163*	.195**	.102*	
P-value	.125	.003	.078	.016	.077	
Obs.	253	253	253	254	254	
Average distance	1.34	1.34	1.34	1.34	1.34	

Table A.13: Results of the matching estimations on the main outcomes variables, matching observations based on their median systolic blood pressure value instead of mean

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. The results represent the Average Treatment Effects on Treated (ATET) of getting a referral card on the various outcomes listed in the columns. We restrict the number of matches to be at least 4 and match respondents based on their median systolic blood pressure in 2013, limiting the distance for possible matches to be at most 10. "Distance" represent the mean of the average distances between each observation and their matches. "With controls" includes a sex dummy, age and region dummies.

	Change in	Change in	Prob. of	Diagnosis	Medication		
	systolic	diastolic	being hy-				
	blood	blood	pertensive				
	pressure	pressure	(2017)				
No controls							
ATET	-8.681	-2.590	180	.278***	.107**		
P-value	.131	.273	.101	.000	.027		
Obs.	232	232	232	232	232		
Average distance	.800	.800	.800	.800	.800		
With controls							
ATET	-9.586*	-1.471	171*	.244***	.086*		
P-value	.083	.540	.076	.001	.093		
Obs.	228	228	228	228	228		
Average distance	.909	.909	.909	.909	.909		
With controls + SD							
ATET	-11.13**	-2.460	148	.224***	.084		
P-value	.033	.268	.128	.006	.135		
Obs.	228	228	228	228	228		
Average distance	1.338	1.338	1.338	1.338	1.338		

Table A.14: Results of the matching estimations on the main outcome variables, using the last two measurements only

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. The results represent the Average Treatment Effects on Treated (ATET) of getting a referral card on the various outcomes listed in the columns. We restrict the number of matches to be at least 4 and match respondents based on their median systolic blood pressure in 2013, limiting the distance for possible matches to be at most 10. "Distance" represent the mean of the average distances between each observation and their matches. "With controls" includes a sex dummy, age and region dummies. Here, we are taking into account only the last two measurements to compute the mean systolic blood pressure.

	Change in systolic blood pressure	Change in diastolic blood pressure	Prob. of being hy- pertensive (2017)	Diagnosis	Medication	
No controls						
ATE	-2.798	-1.901	024	.454***	.249*	
P-value	.751	.671	.883	.003	.071	
Obs.	207	207	207	207	207	
Average distance	1.21	1.21	1.21	1.21	1.21	
With controls						
ATE	-3.637	-2.652	001	.351***	.205***	
P-value	.484	.278	.989	.000	.002	
Obs.	204	204	204	204	204	
Average distance	.984	.984	.984	.984	.984	
With controls + SD						
ATE	-18.94***	-5.890***	.014	.372***	005	
P-value	.000	.007	.885	.000	.9354	
Obs.	204	204	204	204	204	
Average distance	1.59	1.59	1.59	1.59	1.59	

 Table A.15: Results of the matching estimations representing the Average Treatment Effects (ATE)

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. The results represent the Average Treatment Effects (ATE) of getting a referral card on the various outcomes listed in the columns. We restrict the number of matches to be at least 4 and match respondents based on their mean systolic blood pressure in 2013, limiting the distance for possible matches to be at most 10. "Distance" represent the mean of the average distances between each observation and their matches. "With controls" includes a sex dummy, age and region dummies.

	Change weekly hours of moderate activity	Change weekly hours of vigorous activity	Change in weight	Change in BMI	Waist to hip ratio (2017)		
No controls							
ATET	3.790	-7.585**	-2.305	-1.073	033		
P-value	.370	.023	.464	.264	.160		
Obs.	206	204	200	200	202		
Average distance	1.21	1.234	1.211	1.211	1.204		
With controls							
ATET	4.354	-12.42***	061	048	034		
P-value	.261	.001	.953	.926	.108		
Obs.	204	202	200	200	201		
Average distance	.984	.995	1.003	1.003	.998		
With controls + SD							
ATET	-22.54***	-5.302	-1.446	134	.015		
P-value	.000	.109	.139	.765	.348		
Obs.	204	202	200	200	201		
Average distance	1.59	1.594	1.613	1.613	1.612		

Table A.16: Results of the matching estimations on the change in physical activity and weight

Note: * p < 0.1, ** p < 0.05, *** p < 0.01. The results represent the Average Treatment Effects on Treated (ATET) of getting a referral card on the various outcomes listed in the columns. We restrict the number of matches to be at least 4 and match respondents based on their median systolic blood pressure in 2013, limiting the distance for possible matches to be at most 10. "Distance" represent the mean of the average distances between each observation and their matches. "With controls" includes a sex dummy, age and region dummies.