

## SUPPLEMENTAL MATERIAL

### A. Supplemental Tables and Figures

1. **Supplemental Table 1.** Descriptive characteristics of hypertensive patients with or without hypercholesterolemia based on optional (lower) goals
2. **Supplemental Table 2.** Numeric data and p-values for bar graphs in Figure 2 (manuscript)
3. **Supplemental Table 3.** Odds ratios (OR), lower (LCL) and upper (UCL) 95% confidence limits for Figure 3
4. **Supplemental Table 4.** Numeric data and p-values for bar graphs in Supplemental Figure 1
5. **Supplemental Table 5.** Odds ratios and 95% confidence limits for data in Supplemental Figure 2
6. **Supplemental Table 6.** Changes in Framingham 10-yr CHD risk score and risk factor control in CHD risk equivalent patients over time
7. **Supplemental Figure 1A.** LDL and non-HDL-C control to optional goals and BP to <140/<90 in hypercholesterolemic hypertensive patients  
**Supplemental Figure 1B.** Same as A except BP control <140/<90 in patients without and <130/<80 in patients with DM/CKD  
**Supplemental Figure 1C.** Control of BP and non-HDL-C to optional goals in hypercholesterolemic hypertensive patients with and without LDL-C
8. **Supplemental Figure 2.** Relationship of clinical variables to control of LDL-C and non-HDL-C to optional goals and hypertension to <140/<90

### B. Legends for Supplemental Tables and Figures

1. **Supplemental Table 1:** Characteristics are provided on hypertensive patients with or without hypercholesterolemia defined by optional LDL and non-HDL goals across three NHANES periods. Abbreviations are the same as Table 1. Non-overlapping 95% confidence intervals on variables between groups are accepted as significant.
2. **Supplemental Table 2:** Cholesterol and blood pressure control values in percent and p-values are provided for data displayed in Figure 2.
3. **Supplemental Table 3:** Multivariable odds ratios and 95% confidence limits are provided for ‘predictors’ of cholesterol and BP control in Figure 3. The first row for each independent variable is for NHANES 2005–2010, the second row 1999–2004, and the third NHANES 1988–1994: OR, odds ratio; LCL, lower confidence limit; UCL, upper confidence limit. Confidence limits not crossing 1.0 are considered significant.

4. **Supplemental Table 4:** Control values in % and p-values for comparisons between the three NHANES time periods are provided for Supplemental Figure 1 based on the lower optional cholesterol targets.
5. **Supplemental Table 5:** ORs and 95% CLs are provided for Supplemental Figure 2 based on optional goals for LDL and non-HDL cholesterol. Abbreviations are the same as Supplemental Table 3, Figure 3.
6. **Supplemental Table 6.** The distribution of Framingham 10-yr CHD risk scores across NHANES time periods are shown for individuals without CHD risk equivalent conditions, i.e., diabetes and clinical cardiovascular disease. Changes in BP and cholesterol control are provided for CHD risk equivalent subjects across time periods.
7. **Supplemental Figure 1:** Hypertension and hypercholesterolemia control (mean, standard error) (A) optional cholesterol goals, BP <140/<90, (B) Same as A except BP <130/<80 for diabetes/CKD, (C) Control of BP<140/<90 and non-HDL-C (optional goals) with and without LDL-C. P-values are provided in Supplemental Table 5.
8. **Supplemental Figure 2:** The independent relationship (multivariable odds ratios and 95% CI) are depicted between selected clinical variables and control of cholesterol to optional goals and BP. 95% CIs that do not cross the line of identity (1.0) are accepted as statistically significant.

## Supplemental Tables and Figures

**Supplemental Table 1. Descriptive characteristics of hypertensive patients with LDL-C with or without hypercholesterolemia by LDL-C based on optional (lower) goals.**

Characteristics Mean (95% CI)		1988– 1994 Optional goal for lipid control LDL and NON-HDL		1999-2004 Optional goal for lipid control LDL and NON-HDL		2005-2010 Optional goal for lipid control LDL and NON-HDL	
		HTN+HL (n=1747) (N=15003888)	HTN-HL (n=463) (N=4236734)	HTN+HL (n=1691) (N=19735790)	HTN-HL (n=478) (N=6632731)	HTN+HL (n=2150) (N=23166293)	HTN-HL (n=551) (N=7061075)
Number, %		78.0 (74.8-81.2)	22.0 (18.8-25.2)	74.8 (72.4-77.3)	25.2 (22.7-27.6)	76.6 (74.5-78.8)	23.4 (21.2-25.5)
Age, years		59.8 (58.2-61.4)	47.1 (44.5-49.8)	59.7 (58.7-60.8)	48.6 (47.2-50.0)	60.9 (59.8-61.9)	48.9 (47.2-50.6)
Gender, % male		50.0 (46.9-53.2)	40.8 (34.8-46.8)	50.0 (47.9-52.1)	41.8 (36.0-47.6)	48.9 (46.6-51.1)	45.6 (39.9-51.3)
Race	White	78.8 (75.8-81.8)	71.2 (66.1-76.4)	76.4 (72.3-80.4)	73.1 (67.4-78.9)	74.0 (69.5-78.5)	69.2 (63.1-75.3)
	Black	11.7 (9.7-13.7)	19.8 (15.8-23.9)	11.0 (8.6-13.4)	14.3 (9.8-18.7)	12.0 (9.1-14.9)	16.9 (12.9-20.9)
	Hispanic	3.4 (2.7-4.0)	4.3 (2.9-5.8)	8.0 (4.7-11.2)	10.1 (5.4-14.7)	8.5 (5.9-11.0)	9.4 (6.7-12.2)
BMI, kg/m <sup>2</sup>	<25, %	24.9 (21.7-28.2)	39.4 (31.5-47.3)	21.5 (19.6-23.3)	27.5 (23.6-31.4)	18.3 (16.3-20.4)	29.9 (23.9-35.8)
	≥30, %	37.8 (34.3-41.3)	34.6 (27.0-42.3)	42.3 (39.2-45.4)	42.0 (37.8-46.2)	49.8 (47.3-52.4)	44.0 (38.8-49.2)
Visits /year	(0-1)	28.2 (24.5-32.0)	40.7 (32.7-48.6)	18.2 (15.8-20.6)	28.8 (22.0-35.7)	17.7 (14.6-20.7)	29.0 (25.3-32.8)
	(2-3)	27.7 (25.0-30.4)	24.1 (18.3-29.9)	29.7 (26.7-32.6)	28.9 (23.8-34.1)	27.3 (24.9-29.7)	28.5 (23.6-33.3)
	(≥4)	44.1 (40.8-47.4)	35.3 (28.5-42.0)	52.1 (48.6-55.7)	42.2 (35.2-49.3)	55.0 (51.2-58.9)	42.5 (37.1-47.8)
Uninsured, %		6.4 (3.8-9.0)	14.0 (8.4-19.6)	7.6 (5.9-9.3)	13.2 (10.0-16.4)	10.9 (8.9-12.9)	17.9 (14.3-21.6)
Blood	SBP, mm Hg	138.3	131.4	138.6	135.7	133.2	130.0

Pressure		(136.6-139.9)	(128.4-134.4)	(137.3-139.8)	(133.7-137.8)	(132.3-134.1)	(128.2-131.7)
Blood Pressure	DBP, mmHg	78.2 (77.1-79.4)	78.2 (76.9-79.4)	75.1 (74.2-76.0)	78.5 (76.8-80.2)	70.9 (69.9-71.9)	74.7 (73.1-76.4)
	BP meds, %	52.4 (48.3-56.4)	35.1 (29.4-40.8)	63.5 (59.7-67.4)	41.0 (34.6-47.4)	74.2 (71.6-76.8)	52.8 (47.8-57.8)
	BP <140/<90, %	41.2 (36.4-45.9)	51.8 (44.6-59.0)	46.0 (42.4-49.5)	41.0 (34.6-47.5)	57.7 (55.2-60.1)	60.4 (55.7-65.2)
	u2tHT-NHT	13.6 (10.6-16.6)	32.4 (27.0-37.7)	9.7 (7.7-11.6)	14.2 (9.9-18.5)	8.4 (6.3-10.5)	17.0 (13.5-20.5)
	Total Cholesterol mg/dL	229.0 (227.0-231.0)	172.7 (176.7-180.7)	214.0 (211.5-216.6)	179.9 (177.4-182.4)	201.8 (199.7-203.9)	175.9 (172.8-179.0)
Lipids	HDL-C, mg/dl	48.6 (47.4-49.9)	53.8 (51.1-56.5)	51.3 (50.5-52.1)	57.3 (55.2-59.3)	52.7 (51.9-53.4)	56.0 (54.0-58.0)
	Triglycerides, mg/dL	161.7 (155.5-167.9)	121.2 (112.4-130.0)	159.3 (154.6-163.9)	120.2 (114.2-126.3)	147.0 (142.8-151.1)	116.2 (109.7-122.6)
	LDL-C, mg/dL	148.1 (145.9-150.2)	98.7 (95.2-102.2)	130.9 (128.5-133.3)	98.6 (96.5-100.7)	119.8 (117.9-121.6)	96.7 (94.2-99.1)
	Non-HDL-C, mg/dL	180.4 (178.3-182.5)	122.9 (119.6-126.2)	162.7 (160.3-165.2)	122.6 (120.4-124.8)	149.2 (147.3-151.0)	119.9 (117.6-122.2)
	Lipid Med, %	6.0 (4.2-7.7)		29.4 (26.8-32.1)		44.9 (42.1-47.7)	
	Statin, %	3.5 (2.2-4.8)		26.8 (24.3-29.3)		41.9 (39.0-44.8)	
	Diabetes Mellitus, %	10.5 (8.5-12.4)	0.3 (0.1-0.5)	13.4 (11.6-15.3)	0.5 (0.0-1.1)	23.7 (21.6-25.7)	1.7 (0.7-2.8)
Risk Factors	Current Smoker, %	21.1 (17.6-24.7)	23.0 (18.1-27.8)	15.8 (13.3-18.3)	17.5 (12.2-22.9)	17.9 (15.4-20.4)	21.6 (16.6-26.5)
	CKD, %	11.3 (9.1-13.5)	5.1 (3.1-7.1)	14.2 (12.3-16.0)	8.0 (5.0-10.9)	17.0 (14.9-19.1)	9.8 (7.1-12.4)
	CVD, %	21.0 (18.1-23.8)	1.3 (0.2-2.4)	23.3 (20.2-26.4)	0.8 (0.1-1.5)	26.8 (24.0-29.7)	2.0 (0.8-3.1)
	10-yr FCR >20%	37.9 (34.2-41.5)	1.7 (0.6-2.8)	36.8 (34.1-39.5)	1.4 (0.5-2.3)	46.6 (43.6-49.6)	3.6 (1.8-5.3)
	10-yr FCR 10% - 20%	27.1 (23.7-30.5)	8.4 (4.4-12.3)	25.3 (22.9-27.6)	8.2 (5.4-10.9)	21.0 (18.7-23.3)	6.9 (4.5-9.4)
	10-yr FCR<10%	35.0 (31.8-38.3)	89.9 (85.7-94.2)	37.9 (35.2-40.7)	90.4 (87.7-93.1)	32.5 (29.5-35.4)	89.5 (86.2-92.8)

**Supplemental Table 2. Mean risk factor values in percent and p-values for the bar graphs in Figure 2.**

Values	Values in % for bar graph in Figure 2A			P-values		
	1988-1994	1994-2004	2005-2010	1988-1994 vs. 1999-2004	1999-2004 vs. 2005-2010	1988-1994 vs. 2005-2010
NHANES Period Risk Factor(s)						
Htn	40.4	45.4	58.3	0.13	p<0.0001	p<0.0001
LDL	9.2	29.0	45.4	p<0.0001	p<0.0001	p<0.0001
LDL+Non-HDL	2.3	21.8	38.9	p<0.0001	p<0.0001	p<0.0001
Htn+LDL	5.0	16.3	30.7	p<0.0001	p<0.0001	p<0.0001
Htn+LDL+Non-HDL	1.8	13.2	26.9	p<0.0001	p<0.0001	p<0.0001

Values	Values in % for bar graph in Figure 2B			P-values		
	1988-1994	1994-2004	2005-2010	1988-1994 vs. 1999-2004	1999-2004 vs. 2005-2010	1988-1994 vs. 2005-2010
NHANES Period Risk Factor(s)						
Htn	35.7	40.1	51.1	0.18	p<0.0001	p<0.0001
Htn+LDL	4.9	14.6	26.1	p<0.0001	p<0.0001	p<0.0001
Htn+LDL+Non-HDL	1.7	11.6	23.2	p<0.0001	p<0.0001	p<0.0001

Values	Values in % for bar graph in Figure 2C			P-values		
	1988-1994	1994-2004	2005-2010	1988-1994 vs. 1999-2004	1999-2004 vs. 2005-2010	1988-1994 vs. 2005-2010
NHANES Period Risk Factor(s)						
Htn w/LDL	41.0	45.5	58.5	0.19	p<0.0001	p<0.0001
Htn no LDL	33.8	41.0	54.0	p<0.01	p<0.0001	p<0.0001
Non-HDL w/LDL	2.7	25.3	43.1	p<0.0001	p<0.0001	p<0.0001
Non-HDL no LDL	1.3	17.7	35.8	p<0.0001	p<0.0001	p<0.0001
Htn+Non-HDL w/LDL	2.1	15.1	29.7	p<0.0001	p<0.0001	p<0.0001
Htn+Non-HDL no LDL	0.8	9.7	22.9	p<0.0001	p<0.0001	p<0.0001

**Supplemental Table 3: Multivariable Odds Ratios and 95% Confidence Limits for Data in Figure 3.**

Descriptor		Control of LDL (Recommended goal)			Control of LDL and Non-HDL (Recommended goal)			Control of Htn and LDL (Recommended goal)			Control of Htn, LDL and Non-HDL (Recommended goal)		
		Odds	LCL	UCL	Odds	LCL	UCL	Odds	LCL	UCL	Odds	LCL	UCL
Age		0.77	0.66	0.90	0.75	0.65	0.87	0.74	0.62	0.88	0.80	0.66	0.96
		0.88	0.75	1.02	0.81	0.67	0.97	0.75	0.64	0.88	0.73	0.59	0.90
		0.61	0.45	0.83	0.51	0.37	0.69	0.56	0.44	0.71	0.52	0.42	0.64
Male		0.88	0.65	1.19	0.96	0.73	1.26	0.99	0.76	1.29	0.96	0.72	1.29
		0.63	0.42	0.93	0.65	0.46	0.94	1.10	0.73	1.64	1.06	0.68	1.65
		2.87	1.63	5.05	0.22	0.11	0.44	0.18	0.07	0.47	0.08	0.03	0.23
Race	Black	0.69	0.52	0.91	0.57	0.43	0.75	0.48	0.36	0.64	0.59	0.44	0.80
		0.58	0.37	0.89	0.53	0.35	0.81	0.53	0.37	0.75	0.68	0.46	1.01
		0.72	0.43	1.21	0.43	0.26	0.71	0.46	0.26	0.83	0.44	0.22	0.86
		0.82	0.48	1.40	0.87	0.47	1.62	0.19	0.08	0.48	0.27	0.10	0.73
	Hispanic	0.67	0.46	0.97	0.83	0.57	1.21	0.62	0.42	0.92	0.66	0.44	0.99
		0.60	0.37	0.97	0.58	0.34	1.00	0.50	0.21	1.18	0.50	0.18	1.43
		1.11	0.55	2.22	0.58	0.23	1.47	0.51	0.17	1.52	0.36	0.08	1.53
	Other	0.49	0.23	1.02	0.66	0.28	1.55	1.01	0.55	1.85	1.29	0.66	2.54
		1.15	0.40	3.30	1.91	0.71	5.13	0.82	0.36	1.90	1.15	0.45	2.95
		1.73	0.58	5.17	4.13	1.37	12.47	2.86	0.77	10.6	5.99	1.69	21.2
BMI	<25	0.92	0.56	1.52	1.09	0.63	1.88	1.06	0.69	1.65	0.98	0.61	1.58
		0.89	0.56	1.42	0.80	0.47	1.38	1.09	0.56	2.12	0.85	0.39	1.86
		1.68	0.87	3.25	1.73	0.81	3.70	1.99	0.76	5.25	2.01	0.76	5.33
	≥ 30	0.96	0.59	1.55	1.33	0.83	2.12	1.26	0.80	1.98	1.21	0.73	1.99
		1.19	0.67	2.09	1.17	0.62	2.22	1.13	0.52	2.45	0.82	0.35	1.92
		1.25	0.63	2.47	0.95	0.42	2.13	1.30	0.51	3.28	0.78	0.31	1.98
Visits /year	(2-3)	0.74	0.50	1.11	0.87	0.55	1.38	1.85	1.05	3.26	1.94	1.05	3.58
		1.08	0.73	1.62	1.39	0.84	2.29	1.91	0.84	4.34	2.37	0.92	6.06
		1.44	0.75	2.77	1.15	0.43	3.06	2.43	1.14	5.20	1.90	0.58	6.21
	(≥ 4)	0.99	0.62	1.58	1.06	0.67	1.69	1.93	1.17	3.19	1.89	1.15	3.10
		0.95	0.61	1.49	0.99	0.63	1.57	2.07	0.93	4.60	2.12	0.81	5.51
		2.01	0.90	4.47	2.42	0.90	6.48	2.54	1.23	5.26	3.06	1.20	7.80
Uninsured		0.90	0.55	1.47	1.08	0.65	1.78	0.99	0.55	1.76	1.19	0.61	2.30
		2.31	1.38	3.87	2.96	1.69	5.16	2.10	1.04	4.23	2.10	1.04	4.27
		0.71	0.22	2.23	1.23	0.35	4.39	0.55	0.11	2.73	0.54	0.08	3.73
SBP		1.01	0.90	1.13	1.01	0.90	1.14	x	x	x	x	x	x
		0.82	0.70	0.97	0.78	0.64	0.96	x	x	x	x	x	x

Blood Pressure	/10mm Hg	0.85	0.68	1.07	0.83	0.61	1.10	x	x	x	x	x	x
	DBP /10mm Hg	0.91	0.81	1.02	0.87	0.77	0.98	x	x	x	x	x	x
		1.03	0.90	1.18	1.03	0.90	1.20	x	x	x	x	x	x
		0.97	0.78	1.21	0.91	0.71	1.17	x	x	x	x	x	x
	BP <140/<90	1.56	1.08	2.26	1.29	0.86	1.92	x	x	x	x	x	x
		0.55	0.31	0.95	0.42	0.20	0.89	x	x	x	x	x	x
		1.24	0.56	2.71	1.06	0.36	3.11	x	x	x	x	x	x
	BP meds	1.16	0.75	1.79	1.17	0.71	1.93	3.79	2.45	5.87	3.94	2.44	6.35
		1.05	0.73	1.50	1.12	0.72	1.75	3.23	2.19	4.78	5.03	2.91	8.68
		0.76	0.39	1.47	0.61	0.27	1.37	1.73	0.88	3.40	1.30	0.55	3.06
Lipids	HDL /(10mg/dl)	0.81	0.73	0.90	x	x	x	x	x	x	x	x	x
		0.79	0.68	0.92	x	x	x	x	x	x	x	x	x
		1.09	0.90	1.33	x	x	x	x	x	x	x	x	x
	Triglycerides (100mg/dl)	0.90	0.67	1.11	0.37	0.27	0.50	x	x	x	x	x	x
		1.11	0.82	1.49	0.61	0.45	0.74	x	x	x	x	x	x
		1.82	1.35	2.22	0.67	0.40	1.00	x	x	x	x	x	x
	Non-statin	3.80	1.86	7.76	5.82	3.16	10.71	2.89	1.18	7.12	3.80	1.81	7.98
		2.99	1.10	8.16	3.13	1.57	6.24	2.80	0.81	9.71	1.89	0.52	6.83
		2.24	0.81	6.23	2.38	0.77	7.34	1.01	0.32	3.23	1.70	0.48	6.06
	Statin	19.7	14.4	27.0	23.6	16.2	34.5	8.01	5.72	11.2	10.8	7.31	16.1
		16.1	9.1	28.3	20.3	12.6	32.5	7.02	4.16	11.9	8.96	5.14	15.6
		1.90	0.55	6.59	2.65	0.79	8.88	1.80	0.65	4.99	1.89	0.56	6.38
Risk Factors	Smoke	0.78	0.56	1.10	0.90	0.63	1.28	1.13	0.77	1.66	1.06	0.74	1.52
		0.89	0.53	1.49	0.74	0.43	1.27	1.07	0.68	1.69	0.75	0.43	1.29
		0.86	0.43	1.74	0.96	0.44	2.11	1.23	0.55	2.72	2.06	0.76	5.55
	CKD	1.16	0.75	1.80	1.11	0.74	1.67	0.96	0.66	1.37	0.89	0.62	1.29
		1.25	0.78	1.99	1.34	0.86	2.09	1.06	0.59	1.89	1.04	0.57	1.92
		0.75	0.32	1.80	1.18	0.44	3.16	0.85	0.34	2.11	0.91	0.25	3.27
	CVD	0.32	0.21	0.48	0.31	0.21	0.46	0.50	0.37	0.67	0.50	0.37	0.67
		0.21	0.12	0.36	0.19	0.11	0.33	0.43	0.26	0.71	0.34	0.19	0.58
		0.06	0.03	0.16	0.05	0.01	0.19	0.13	0.04	0.48	0.14	0.04	0.53
	DM	0.52	0.37	0.73	0.45	0.32	0.62	0.60	0.42	0.84	0.47	0.34	0.65
		0.44	0.29	0.66	0.41	0.26	0.66	0.74	0.47	1.17	0.59	0.39	0.88
		0.03	0.01	0.09	0.01	<0.001	0.05	0.02	0.00	0.10	0.01	0.00	0.13

**Supplemental Table 4. Data and P-values for Supplemental Figure 1.**

Values	Values for bar graph in e-Figure 1A			P values		
NHANES Period Risk Factor(s)	1988-1994	1994-2004	2005-2010	1988-1994 vs. 1999-2004	1999-2004 vs. 2005-2010	1988-1994 vs. 2005-2010
Htn	41.2	46.0	57.7	0.10	p<0.0001	p<0.0001
LDL	5.7	15.1	22.2	p<0.0001	p<0.0001	p<0.0001
LDL+Non-HDL	1.1	10.3	17.3	p<0.0001	p<0.0001	p<0.0001
Htn+LDL	3.5	8.1	16.2	p<0.0001	p<0.0001	p<0.0001
Htn+LDL+Non-HDL	0.9	6.0	13.2	p<0.0001	p<0.0001	p<0.0001

Values	Values for bar graph in e-Figure 1B			P values		
NHANES Period Risk Factor(s)	1988-1994	1994-2004	2005-2010	1988-1994 vs. 1999-2004	1999-2004 vs. 2005-2010	1988-1994 vs. 2005-2010
Htn	36.9	40.8	51.0	0.17	p<0.0001	p<0.0001
Htn+LDL	3.5	7.5	14.6	p<0.01	p<0.0001	p<0.0001
Htn+LDL+Non-HDL	0.8	5.6	12.2	p<0.0001	p<0.0001	p<0.0001

Values	Values for bar graph in e-Figure 1C			P values		
NHANES Period Risk Factor(s)	1988-1994	1994-2004	2005-2010	1988-1994 vs. 1999-2004	1999-2004 vs. 2005-2010	1988-1994 vs. 2005-2010
Htn w/LDL	41.1	45.8	58.1	0.14	p<0.0001	p<0.0001
Htn no LDL	34.3	40.6	52.6	p<0.01	p<0.0001	p<0.0001
Non-HDL w/LDL	1.4	12.9	22.2	p<0.0001	p<0.0001	p<0.0001
Non-HDL no LDL	0.5	7.3	18.3	p<0.0001	p<0.0001	p<0.0001
Htn+Non-HDL w/LDL	1.0	7.6	16.4	p<0.0001	p<0.0001	p<0.0001
Htn+Non-HDL no LDL	0.4	3.9	12.4	p<0.0001	p<0.0001	p<0.0001

**Supplemental Table 5: Multivariable Odds Ratios and 95% Confidence Limits for data in e-Figure 2.**

Descriptor		Control of LDL (Optional goal)			Control of LDL and Non-HDL (Optional goal)			Control of Htn and LDL (Optional goal)			Control of Htn, LDL and Non-HDL (Optional goal)		
		Odds	LCL	UCL	Odds	LCL	UCL	Odds	LCL	UCL	Odds	LCL	UCL
Age/10 years		0.79	0.74	0.85	0.78	0.72	0.84	0.70	0.64	0.75	0.71	0.66	0.78
		0.78	0.71	0.87	0.78	0.70	0.87	0.73	0.64	0.83	0.78	0.67	0.89
		0.89	0.79	0.99	0.87	0.76	0.98	0.71	0.62	0.79	0.69	0.61	0.80
		0.70	0.60	0.82	0.68	0.59	0.79	0.57	0.49	0.66	0.56	0.49	0.64
Gender	Male	0.89	0.75	1.07	0.83	0.69	1.00	0.82	0.67	1.00	0.80	0.64	0.99
		0.99	0.77	1.28	0.98	0.78	1.24	1.01	0.78	1.31	0.99	0.75	1.30
		0.85	0.61	1.18	0.80	0.57	1.13	1.05	0.74	1.50	1.03	0.71	1.48
		0.67	0.45	1.01	0.58	0.38	0.86	0.24	0.12	0.46	0.20	0.11	0.38
	Black	0.87	0.72	1.06	0.82	0.68	0.99	0.65	0.53	0.80	0.77	0.63	0.94
		0.71	0.53	0.94	0.73	0.56	0.95	0.67	0.49	0.92	0.82	0.59	1.14
		0.97	0.70	1.35	0.79	0.57	1.09	0.74	0.51	1.08	0.80	0.53	1.20
		1.04	0.65	1.64	1.05	0.68	1.62	0.43	0.27	0.68	0.54	0.34	0.87
	Hispanic	0.92	0.70	1.20	0.96	0.74	1.25	0.67	0.51	0.88	0.71	0.53	0.95
		0.76	0.55	1.05	0.89	0.64	1.24	0.69	0.49	0.96	0.73	0.52	1.03
		0.82	0.51	1.31	0.82	0.52	1.28	0.59	0.30	1.15	0.61	0.30	1.27
		1.42	0.89	2.27	1.25	0.77	2.02	0.64	0.34	1.22	0.63	0.31	1.27
	Other	1.00	0.64	1.55	1.36	0.85	2.18	1.21	0.75	1.96	1.46	0.90	2.38
		0.60	0.33	1.11	0.82	0.40	1.66	1.14	0.62	2.09	1.36	0.74	2.50
		1.36	0.70	2.66	1.86	0.97	3.56	0.90	0.44	1.84	1.17	0.55	2.45
		1.41	0.61	3.25	2.19	0.88	5.47	2.03	0.72	5.75	2.77	1.01	7.54
BMI	<25	0.82	0.65	1.04	0.80	0.63	1.02	1.06	0.81	1.37	0.94	0.71	1.24
		0.78	0.53	1.16	0.85	0.55	1.31	1.01	0.73	1.39	0.94	0.67	1.33
		0.76	0.53	1.08	0.71	0.48	1.05	1.11	0.64	1.92	0.94	0.53	1.67
		0.91	0.62	1.34	0.84	0.55	1.27	1.11	0.62	2.00	0.99	0.54	1.80
	≥ 30	1.05	0.83	1.34	1.03	0.81	1.30	1.18	0.91	1.54	1.03	0.80	1.34
		0.90	0.64	1.25	1.02	0.72	1.44	1.17	0.87	1.58	1.12	0.82	1.51
		1.13	0.72	1.77	1.07	0.67	1.71	1.20	0.62	2.34	0.99	0.50	1.96
		0.86	0.56	1.33	0.71	0.44	1.14	0.83	0.54	1.27	0.61	0.38	1.00
	(2-3)	1.00	0.82	1.23	1.05	0.83	1.32	1.79	1.32	2.44	1.79	1.32	2.42
		0.66	0.49	0.89	0.71	0.51	0.99	1.73	1.08	2.76	1.72	1.06	2.80
		1.15	0.83	1.59	1.32	0.91	1.90	2.22	1.25	3.92	2.46	1.32	4.56
		1.24	0.89	1.74	1.14	0.73	1.77	1.62	0.93	2.81	1.34	0.67	2.69

Visits /year	(≥ 4)	1.08	0.87	1.34	1.09	0.87	1.38	1.81	1.34	2.45	1.75	1.29	2.38	
		0.82	0.55	1.22	0.86	0.59	1.27	1.80	1.16	2.80	1.73	1.12	2.67	
		1.02	0.71	1.45	1.03	0.72	1.45	2.13	1.24	3.65	2.06	1.12	3.80	
		1.60	1.10	2.33	1.69	1.14	2.52	1.88	1.11	3.19	1.96	1.10	3.51	
Uninsured		1.04	0.74	1.46	1.14	0.82	1.60	1.08	0.77	1.52	1.14	0.80	1.62	
		0.83	0.55	1.27	0.93	0.61	1.41	0.98	0.65	1.49	1.09	0.71	1.69	
		1.39	0.89	2.16	1.49	0.96	2.33	1.15	0.68	1.95	1.03	0.62	1.72	
		0.76	0.36	1.63	0.97	0.42	2.20	0.88	0.33	2.32	1.00	0.38	2.64	
Blood Pressure	SBP /10mm Hg	0.94	0.89	1.00	0.95	0.89	1.02	x	x	x	x	x	x	
		1.04	0.95	1.14	1.04	0.94	1.16	x	x	x	x	x	x	
		0.88	0.78	0.99	0.87	0.77	0.99	x	x	x	x	x	x	
		0.93	0.82	1.06	0.94	0.82	1.08	x	x	x	x	x	x	
	DBP /10mm Hg	0.88	0.83	0.92	0.85	0.80	0.90	x	x	x	x	x	x	
		0.87	0.78	0.96	0.83	0.76	0.91	x	x	x	x	x	x	
		0.93	0.84	1.02	0.91	0.83	1.01	x	x	x	x	x	x	
		0.91	0.78	1.07	0.89	0.75	1.05	x	x	x	x	x	x	
	BP <140/<90	1.18	0.93	1.50	1.10	0.84	1.45	x	x	x	x	x	x	
		1.70	1.17	2.48	1.58	1.06	2.34	x	x	x	x	x	x	
		0.83	0.53	1.28	0.76	0.47	1.23	x	x	x	x	x	x	
		1.41	0.78	2.56	1.28	0.66	2.47	x	x	x	x	x	x	
	BP meds	0.92	0.76	1.10	0.91	0.75	1.10	2.70	2.18	3.36	2.69	2.14	3.39	
		0.92	0.64	1.30	0.88	0.60	1.30	2.74	1.81	4.14	2.58	1.69	3.94	
		0.98	0.76	1.26	1.05	0.76	1.45	3.30	2.34	4.65	3.98	2.64	6.01	
		0.76	0.49	1.17	0.71	0.47	1.07	1.92	1.25	2.92	1.59	1.01	2.53	
Lipids	HDL /(10mg/dl)	1.03	0.98	1.09	x	x	x	x	x	x	x	x	x	
		0.94	0.86	1.04	x	x	x	x	x	x	x	x	x	
		0.98	0.90	1.06	x	x	x	x	x	x	x	x	x	
		1.23	1.08	1.40	x	x	x	x	x	x	x	x	x	
	Triglycerides (100mg/dl)	0.90	0.82	1.00	0.50	0.40	0.55	x	x	x	x	x	x	
		0.82	0.67	1.00	0.40	0.33	0.55	x	x	x	x	x	x	
		0.90	0.74	1.22	0.55	0.50	0.67	x	x	x	x	x	x	
		1.11	0.82	1.35	0.50	0.33	0.74	x	x	x	x	x	x	
		1.23	0.74	2.05	1.14	0.75	1.74	1.13	0.64	2.02	0.99	0.57	1.74	
		1.45	0.74	2.84	1.70	0.92	3.14	1.33	0.57	3.09	1.37	0.68	2.76	

Lipids	Non-statin	1.13	0.45	2.84	0.81	0.39	1.66	1.09	0.32	3.69	0.57	0.16	2.00
		0.74	0.29	1.89	0.59	0.25	1.41	0.57	0.21	1.49	0.71	0.27	1.84
	Statin	5.86	4.80	7.15	5.82	4.73	7.17	3.77	3.05	4.66	4.01	3.15	5.11
		6.72	5.03	8.98	6.56	4.81	8.94	3.57	2.65	4.82	3.83	2.77	5.30
		4.17	3.10	5.61	4.28	3.20	5.73	2.76	1.86	4.12	2.76	1.79	4.26
		0.67	0.26	1.75	0.83	0.34	2.03	0.95	0.35	2.59	0.84	0.28	2.49
	Smoke	0.68	0.56	0.84	0.67	0.53	0.84	0.88	0.70	1.11	0.80	0.62	1.04
		0.74	0.56	1.00	0.77	0.57	1.04	0.90	0.65	1.25	0.82	0.61	1.11
		0.67	0.42	1.07	0.58	0.36	0.93	0.78	0.51	1.22	0.58	0.34	0.98
		0.65	0.45	0.94	0.64	0.44	0.95	0.94	0.53	1.66	1.14	0.61	2.12
Risk Factors	CKD	1.28	1.02	1.60	1.28	1.02	1.59	1.17	0.91	1.50	1.15	0.89	1.48
		1.25	0.86	1.82	1.21	0.85	1.72	1.11	0.82	1.51	1.08	0.79	1.48
		1.25	0.90	1.73	1.25	0.88	1.77	1.27	0.82	1.95	1.28	0.83	1.99
		1.00	0.65	1.55	1.15	0.72	1.84	0.98	0.51	1.91	1.01	0.43	2.37
	CVD	0.30	0.24	0.38	0.30	0.24	0.38	0.51	0.42	0.63	0.51	0.41	0.63
		0.37	0.26	0.52	0.36	0.27	0.50	0.57	0.43	0.74	0.57	0.44	0.74
		0.28	0.18	0.42	0.26	0.17	0.39	0.52	0.34	0.80	0.45	0.29	0.72
		0.16	0.09	0.28	0.18	0.10	0.32	0.23	0.11	0.49	0.27	0.13	0.57
	DM	0.51	0.42	0.63	0.47	0.38	0.58	0.64	0.52	0.79	0.57	0.46	0.69
		0.57	0.42	0.77	0.48	0.36	0.65	0.60	0.46	0.79	0.50	0.38	0.64
		0.46	0.32	0.66	0.45	0.30	0.68	0.65	0.48	0.87	0.56	0.42	0.74
		0.17	0.09	0.31	0.21	0.12	0.37	0.30	0.11	0.81	0.38	0.14	1.07

**Supplemental Table 6. Changes in Framingham 10-yr CHD risk score<sup>1</sup> and risk factor control in CHD risk equivalent patients over time.**

NHANES Period Characteristics Mean (95% CI)	10-yr CHD Risk	1988 – 1994	1999 – 2004	2005 – 2010
<sup>1</sup> All adults	*<10%, % 10–20%, % >20%, %	64.0 (62.6–65.4) 32.7 (31.4–33.9) 3.3 (2.9–3.8)	66.4 (65.1–67.8) 30.9 (29.8–32.1) 2.6 (2.3–3.0)	67.6 (66.2–69.0) 30.4 (29.0–31.7) 2.0 (1.7–2.4)
<sup>1</sup> All men	*<10%, % 10–20%, % >20%, %	50.8 (49.0–52.7) 43.8 (42.1–45.6) 5.4 (4.7–6.1)	53.6 (51.5–55.7) 42.4 (40.6–44.2) 4.0 (3.5–4.6)	55.4 (53.7–57.2) 41.3 (39.6–43.1) 3.3 (2.7–3.9)
<sup>1</sup> All women	*<10%, % 10–20%, % >20%, %	76.1 (74.6–77.5) 22.4 (21.1–23.8) 1.5 (1.2–1.8)	77.9 (76.6 – 79.1) 20.7 (19.6 – 21.9) 1.4 (1.1 – 1.8)	78.7 (77.2–80.1) 20.4 (19.0–21.8) 0.9 (0.7-1.2)
<sup>1</sup> Adults with HTN & Hypercholesterolemia	*<10%, % 10–20%, % >20%, %	11.1 (9.1–13.5) 70.7 (68.2–73.1) 18.2 (15.9–20.7)	15.0 (13.0 – 17.2) 71.6 (69.3 – 73.7) 13.5 (11.9 – 15.2)	17.9 (15.2–21.0) 71.7 (68.5–74.7) 10.4 (8.9–12.1)
<sup>1</sup> Men with HTN & Hypercholesterolemia	*<10%, % 10–20%, % >20%, %	5.6 (3.5-8.9) 69.1 (65.4-72.6) 25.3 (21.9-29.0)	7.8 (5.5-11.0) 74.3 (70.7-77.6) 17.9 (15.9-20.0)	9.3 (7.0-12.3) 76.6 (73.0-79.9) 14.1 (11.6-17.0)
<sup>1</sup> Women with HTN & Hypercholesterolemia	*<10%, % 10–20%, % >20%, %	17.7 (14.1-22.0) 71.5 (67.4-75.3) 10.8 (9.0-12.9)	22.6 (19.4-26.3) 68.0 (64.5-71.3) 9.4 (7.0-12.4)	26.2 (22.1-30.9) 67.1 (62.2-71.6) 6.7 (4.9-9.2)
Adults with CHD Risk Equivalent	<sup>2</sup> BP<140/<90, % <sup>3</sup> Non-HDL, %	78.1 (75.8–80.3) 26.0 (21.7–30.7)	75.6 (71.4–79.3) 30.4 (26.8–34.4)	80.3 (77.3–83.0) 47.9 (43.5–52.4)
Adults with CHD Equivalent, HTN & Hypercholesterolemia	<sup>4</sup> Htn, % <sup>5</sup> Non-HDL, %	44.8 (40.9–48.7) 1.6 (0.6–4.0)	51.9 (48.5–55.4) 18.6 (15.6–21.9)	62.1 (58.8–65.4) 40.4 (37.0–43.9)

\*p<0.001 for change in the distribution of 10-yr CHD risk scores over the three NHANES periods from higher to lower risk.

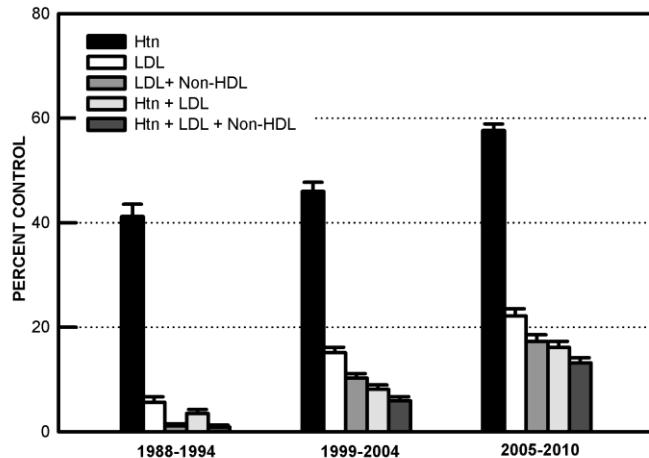
<sup>1</sup>Excludes patients with CHD risk equivalent conditions, i.e. diabetes and clinical cardiovascular disease, as there is no opportunity with better risk factor management to impact their 10-yr CHD risk classification.

Among all CHD risk equivalent adults, the percentage with <sup>2</sup>BP <140/<90mmHg and <sup>3</sup>non-HDL-C <130 mg/dL are provided for the three NHANES periods.

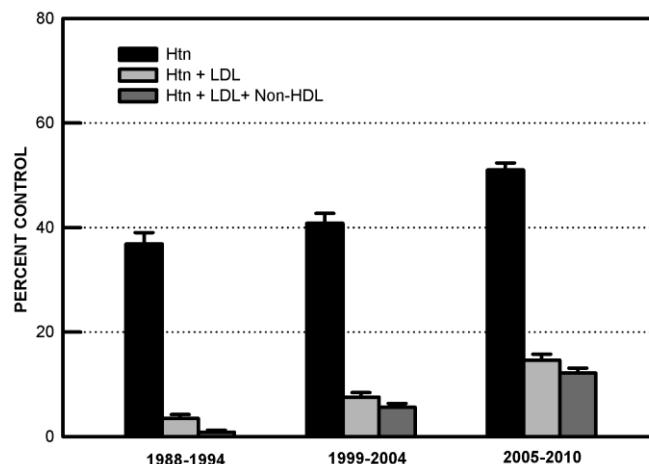
Among all CHD risk equivalent adults, the percentage with <sup>4</sup>BP controlled to <140/<90 and <sup>5</sup>non-HDL to <130 are provided for three NHANES periods.

## Supplemental Figure 1.

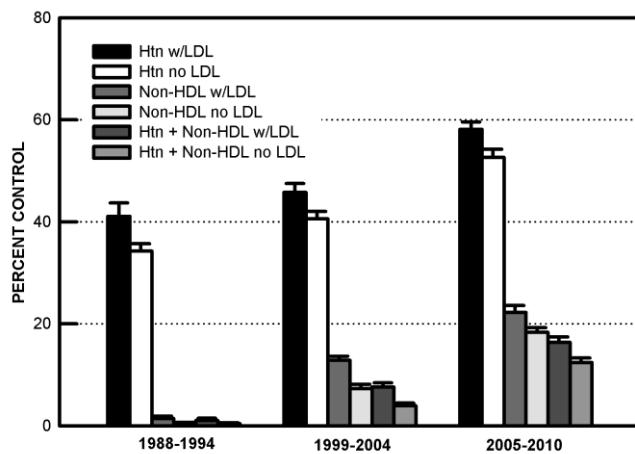
### A. LDL and non-HDL-C control to optional goals and BP to <140/<90 in hypercholesterolemic hypertensives



### B. Same as A except BP control <140/<90 in patients without and <130/<80 in patients with DM and/or CKD



### C. Control of BP and non-HDL-C to optional goals in hypercholesterolemic hypertensives with and without LDL-C



**Supplemental Figure 2. Relationship of clinical variables to control of LDL-C, non-HDL-C (optional goals) and hypertension**

