

SUPPLEMENTARY MATERIAL

Potential Deaths Averted and Serious Adverse Events Incurred from Adoption of the SPRINT Intensive Blood Pressure Regimen in the U.S.: Projections from NHANES

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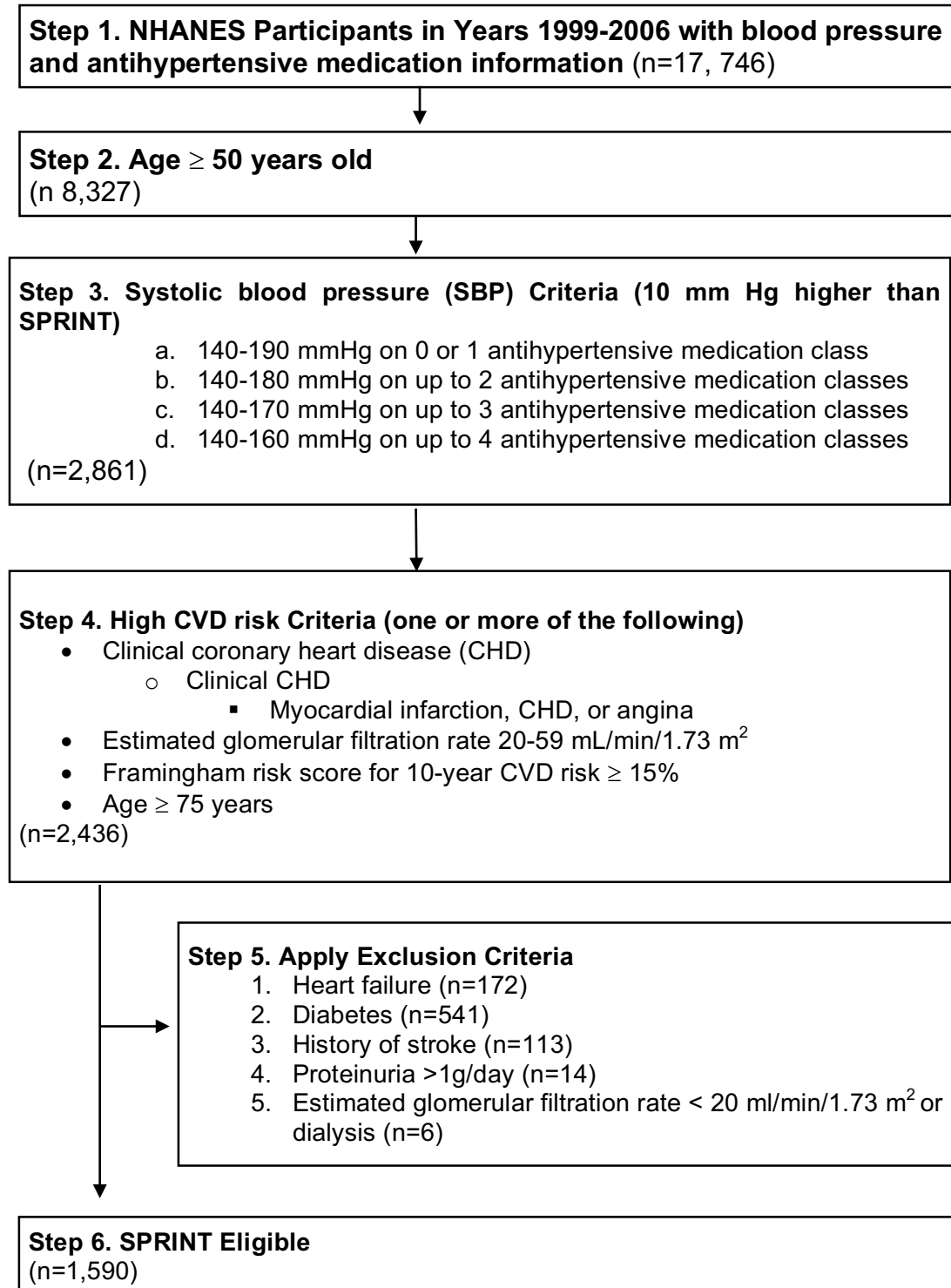
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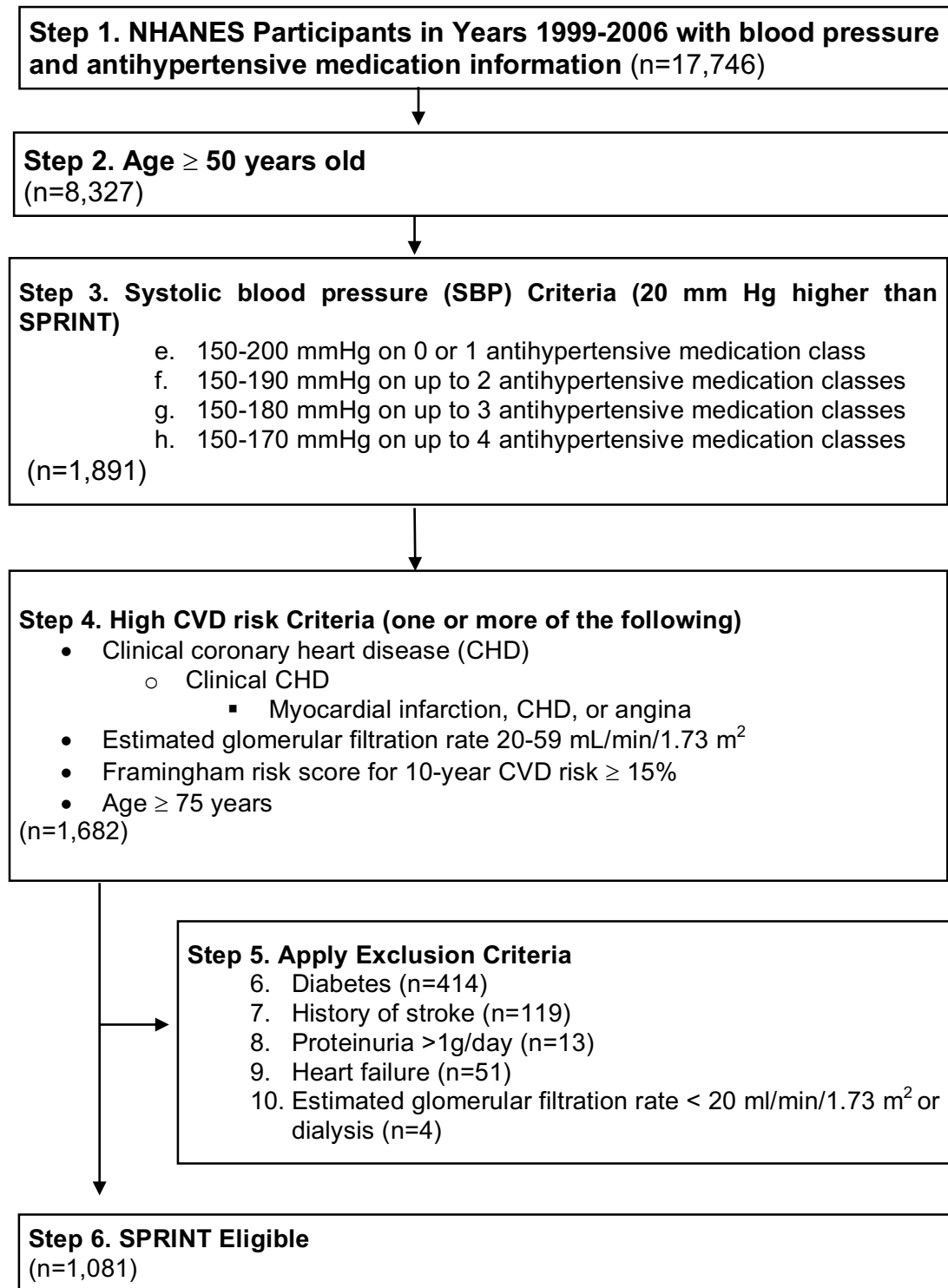
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Supplemental Figure 1. Flowchart showing the SPRINT eligibility criteria applied to the National Health and Nutrition Examination Survey 1999-2006 using a 10 mm Hg higher systolic blood pressure criteria.



Supplemental Figure 2. Flowchart showing the SPRINT eligibility criteria applied to the National Health and Nutrition Examination Survey 1999-2006 using a 20 mm Hg higher systolic blood pressure criteria.



Supplemental Table 1. Calculation of 95% confidence interval for the absolute risk difference serious adverse events between intensive and standard arms from the p values reported in SPRINT.

Serious Adverse Events	Annual Risk*			P Value reported in SPRINT	Calculated 95% CI of the Risk Difference From P Value
	Intensive Arm	Standard Arm	Absolute Risk Difference		
Hypotension	0.74%	0.43%	0.31%	0.001	0.13%-0.49%
Syncope	0.71%	0.52%	0.19%	0.050	0.00%-0.38%
Electrolyte abnormality	0.95%	0.71%	0.24%	0.020	0.04%-0.44%
Acute kidney injury or acute renal failure	1.26%	0.77%	0.49%	<0.001	0.20%-0.78%
SAEs Possibly of Definitely Related to the Intervention					
Hypotension	0.55%	0.25%	0.30%	<0.001	0.12%-0.48%
Syncope	0.43%	0.18%	0.25%	0.006	0.07%-0.43%
Electrolyte abnormality	0.46%	0.31%	0.15%	0.050	0.00%-0.30%
Acute kidney injury or acute renal failure	0.58%	0.21%	0.37%	<0.001	0.15%-0.59%

SBP= systolic blood pressure, SAE = serious adverse event, SPRINT=Systolic Blood Pressure Intervention Trial, CI=confidence interval.

To calculate the 95% CIs for the absolute risk differences for each SAE between intensive and standard SBP treatment arms in SPRINT, we first obtained the Z value corresponding to each p value. Next, we calculated the standard error by dividing the absolute risk difference the Z value. Finally, upper and lower bound 95% confidence limits were calculated by adding and subtracting 1.96 multiplied by the standard error to the absolute risk difference, separately. For p values that are reported as <0.001 we used 0.001 to calculate the confidence interval.

*Calculated by taking the risk reported in SPRINT and dividing by 3.26 (the median follow up in SPRINT in years).

Supplemental Table 2. Analysis of extremes sensitivity analysis for the number of deaths prevented if SPRINT is fully implemented among NHANES participants who meet the SPRINT eligibility criteria overall and in subgroups.

	SPRINT Treatment Effect for All-Cause Mortality								
	Point Estimate (HR 0.73)			Lower Bound 95%CI (HR 0.60)			Upper Bound 95%CI (HR 0.90)		
	All-Cause Mortality			All-Cause Mortality			All-Cause Mortality		
	%/yr (95%CI)	No. per year, thousands (95%CI)	Deaths Prevented Per Year (95%CI)	%/yr (95%CI)	No. per year, thousands (95%CI)	Deaths Prevented Per Year (95%CI)	%/yr (95%CI)	No. per year, thousands (95%CI)	Deaths Prevented Per Year (95%CI)
Overall	1.61 (1.39-1.81)	290.7 (252.4-327.7)	107.5 (93.3-121.2)	1.32 (1.15-1.49)	238.9 (207.4-269.3)	159.3 (138.3-179.6)	1.98 (1.72-2.23)	358.4 (311.1-404.0)	39.8 (34.6-44.9)
Sex									
Men	1.85 (1.55-2.18)	179.1 (150.8-211.7)	66.3 (55.8-78.3)	1.52 (1.28-1.79)	147.2 (124-174)	98.2 (82.6-116)	2.28 (1.92-2.69)	220.9 (185.9-261)	24.5 (20.7-29)
Women	1.32 (1.09-1.61)	111.0 (91.4-134.9)	41.1 (33.8-49.9)	1.09 (0.89-1.32)	91.2 (75.1-110.9)	60.8 (50.1-73.9)	1.63 (1.34-1.98)	136.8 (112.6-166.3)	15.2 (12.5-18.5)
Age Group									
< 75 years	0.88 (0.69-1.12)	108.6 (85.3-138.3)	40.2 (31.5-51.1)	0.73 (0.57-0.92)	89.3 (70.1-113.7)	59.5 (46.7-75.8)	1.09 (0.86-1.39)	133.9 (105.2-170.5)	14.9 (11.7-18.9)
≥ 75 years	3.14 (2.73-3.6)	182.1 (158.4-208.7)	67.3 (58.6-77.2)	2.58 (2.24-2.96)	149.6 (130.2-171.6)	99.8 (86.8-114.4)	3.87 (3.37-4.44)	224.5 (195.2-257.3)	24.9 (21.7-28.6)
Race/ethnicity									
Non-Hispanic White	1.59 (1.39-1.83)	240.3 (209.4-276.7)	88.9 (77.5-102.3)	1.31 (1.14-1.51)	197.5 (172.1-227.4)	131.7 (114.8-151.6)	1.96 (1.71-2.26)	296.3 (258.2-341.1)	32.9 (28.7-37.9)
Non-Hispanic Black	1.84 (1.37-2.45)	23.9 (17.7-31.9)	8.8 (6.6-11.8)	1.51 (1.12-2.02)	19.7 (14.6-26.2)	13.1 (9.7-17.5)	2.27 (1.68-3.02)	29.5 (21.9-39.3)	3.3 (2.4-4.4)
Mexican American	1.07 (0.69-1.64)	0.5 (0.3-0.8)	0.2 (0.1-0.3)	0.88 (0.57-1.34)	0.4 (0.3-0.7)	0.3 (0.2-0.4)	1.31 (0.86-2.02)	0.7 (0.4-1.0)	0.1 (0.0-0.1)
Other	1.72 (0.85-3.33)	20.6 (10.2-39.9)	7.6 (3.8-14.8)	1.41 (0.7-2.74)	16.9 (8.4-32.8)	11.3 (5.6-21.9)	2.12 (1.05-4.1)	25.4 (12.6-49.2)	2.8 (1.4-5.5)
History of CHD	2.42 (1.7-3.39)	53.2 (37.4-74.7)	19.7 (13.8-27.6)	1.99 (1.4-2.79)	43.7 (30.8-61.4)	29.1 (20.5-40.9)	2.98 (2.1-4.19)	65.5 (46.1-92.1)	7.3 (5.1-10.2)
Baseline SBP									
SBP ≤132 mmHg	1.47 (0.91-2.34)	26.5 (16.4-42.2)	9.8 (6.1-15.6)	1.21 (0.75-1.93)	21.8 (13.5-34.7)	14.5 (9-23.1)	1.82 (1.13-2.89)	32.7 (20.3-52)	3.6 (2.3-5.8)
SBP 133-144 mmHg	1.35 (1.08-1.67)	99.9 (79.9-123.7)	37.0 (29.6-45.8)	1.11 (0.89-1.37)	82.1 (65.7-101.7)	54.8 (43.8-67.8)	1.67 (1.33-2.06)	123.2 (98.6-152.5)	13.7 (11.0-16.9)
SBP ≥ 145 mmHg	1.84 (1.57-2.16)	163.7 (139.7-192.3)	60.6 (51.7-71.1)	1.51 (1.29-1.78)	134.6 (114.8-158.1)	89.7 (76.5-105.4)	2.27 (1.94-2.66)	201.9 (172.2-237.1)	22.4 (19.1-26.3)
eGFR 20-59 ml/min/1.73 m²	2.15 (1.73-2.66)	88.3 (70.9-109.2)	32.7 (26.2-40.4)	1.77 (1.42-2.19)	72.6 (58.3-89.8)	48.4 (38.9-59.9)	2.66 (2.13-3.29)	108.9 (87.5-134.7)	12.1 (9.7-15)

HR= Hazard ratio, CHD = coronary heart disease, SBP=systolic blood pressure, SPRINT - Systolic Blood Pressure Intervention Trial, NHANES= National Health and Nutrition Examination Survey.

Estimated glomerular filtration rate (eGFR) in ml/min/1.73 m² was estimated using the CKD-EPI equation using the serum creatinine;

Supplemental Table 3. Characteristics of U.S. adults eligible for SPRINT overall and by antihypertensive medication status using NHANES 1999-2006 using a 10 mm Hg higher systolic blood pressure criteria.

Group	Overall (n=12.80 million)	Taking Antihypertensive Medication (n=5.58 million)	Not Taking Antihypertensive Medication (n=7.22 million)	SPRINT* (n=9,361)
Age, mean (SE), years	69.4 (0.3)	69.2 (0.4)	69.5 (0.5)	67.9 (9.4)
Age group, %				
< 75 years	64.7	66.7	63.1	71.8
≥ 75 years	35.3	33.3	36.9	28.2
Male sex, %	45.7	38.5	51.2	64.4
Race/ethnicity, %				
Non-Hispanic White	81.9	81.4	82.2	57.7
Non-Hispanic black	8.0	9.4	6.9	29.9
Mexican American	3.0	2.4	3.5	NA
Other	7.2	6.8	7.4	1.88
Current smoker, %	15.9	9.3	21.0	13.2
Body mass index, mean (SE)	28.1 (0.2)	28.9 (0.3)	27.5 (0.2)	29.9 (5.7)
Obese, %	30.4	35.8	26.2	NA
eGFR 20 to 59 ml/min/1.73 m², %	20.7	23.2	18.7	28.3
Framingham risk score groups, %				
< 5%	0.0	0.0	0.0	NA
5.0-7.4%	0.0	0.0	0.0	NA
7.5-9.9%	0.9	0.6	1.2	NA
10 - 14.9%	4.3	4.9	3.9	NA
≥ 15%	94.8	94.6	94.9	61.3
History of CHD, %	13.4	19.3	8.8	16.7
Systolic blood pressure, mmHg, %				
≤142	10.2	11.0	9.5	33.5
143 - 154	45.2	43.2	46.8	32.5
≥155	44.6	45.8	43.7	34.0
Education, %				
Less than high school	26.8	24.4	28.7	NA
High school only	29.4	28.8	29.9	NA
More than high school	25.8	28.0	24.0	NA
Completed college	18.0	18.9	17.4	NA
No insurance, %	10.8	7.7	13.2	NA

Numbers in table are expressed as mean (Standard error [SE]) or percentages. Percentages are based on weighted data. CVD - cardiovascular disease, eGFR - estimated glomerular filtration rate, SPRINT - Systolic Blood Pressure Intervention Trial, NHANES= National Health and Nutrition Examination Survey, CHD=coronary heart disease, NA=not applicable.

Obesity defined as body mass index ≥ 30.0 kg/m². Framingham risk score was calculate using the using the equation for general clinical practice.¹ Use of antihypertensive medication was defined by self-report and report of taking one or more classes of antihypertensive medication identified through the pill bottle review.

*Baseline characteristics from SPRINT are shown for comparisons (mean and standard deviation are shown for age and body mass index).

Supplemental Table 4. Observed and predicted annual mortality if SPRINT is fully implemented among NHANES participants who meet the SPRINT eligibility criteria using a 10 mm Hg higher systolic blood pressure criteria.

	SPRINT-eligible U.S. adults in millions (95%CI)	Observed annual mortality among SPRINT-eligible NHANES participants		Predicted annual mortality if SPRINT fully applied		Deaths Prevented if SPRINT fully applied, thousands (95%CI)	Num needed to prevent 1 death (for 3.26)
		% (95%CI)	No. per year, thousands (95%CI)	% (95%CI)	No. per year, thousands (95%CI)*		
Overall	12.8 (11.6-14.0)	2.43 (2.13-2.77)	311.0 (272.6-354.6)	1.77 (1.55-2.02)	227.1 (199.0-258.8)	84.0 (73.6-95.7)	47
Sex							
Men	5.9 (5.1-6.7)	2.97 (2.38-3.60)	175.2 (140.4-212.4)	2.17 (1.74-2.63)	127.9 (102.5-155.1)	47.3 (37.9-57.3)	38
Women	7.0 (6.2-7.7)	1.98 (1.61-2.42)	138.6 (112.7-169.4)	1.45 (1.18-1.77)	101.2 (82.3-123.7)	37.4 (30.4-45.7)	57
Age Group							
< 75 years	8.3 (7.5-9.1)	1.42 (1.11-1.82)	117.9 (92.1-151.1)	1.04 (0.81-1.33)	86.0 (67.3-110.3)	31.8 (24.9-40.8)	80
≥ 75 years	4.5 (3.9-5.1)	4.28 (3.67-4.97)	192.6 (165.2-223.7)	3.12 (2.68-3.63)	140.6 (120.6-163.3)	52.0 (44.6-60.4)	27
Race/ethnicity							
Non-Hispanic White	10.5 (9.1-11.8)	2.39 (2.08-2.75)	251.0 (218.4-288.8)	1.74 (1.52-2.01)	183.2 (159.4-210.8)	67.8 (59.0-78)	48
Non-Hispanic Black	1.0 (0.8-1.2)	2.61 (1.81-3.72)	26.1 (18.1-37.2)	1.91 (1.32-2.72)	19.1 (13.2-27.2)	7.0 (4.9-10.0)	44
Mexican American	0.4 (0.3-0.5)	1.78 (1.10-2.86)	7.1 (4.4-11.4)	1.30 (0.80-2.09)	5.2 (3.2-8.4)	1.9 (1.2-3.1)	64
Other	0.9 (0.6-1.2)	2.95 (1.58-5.32)	26.6 (14.2-47.9)	2.15 (1.15-3.88)	19.4 (10.4-35)	7.2 (3.8-12.9)	39
History of CHD	1.7 (1.3-2.1)	3.91 (2.78-5.41)	66.5 (47.3-92)	2.85 (2.03-3.95)	48.5 (34.5-67.1)	17.9 (12.8-24.8)	29
Baseline SBP							
SBP ≤142 mmHg	1.3 (1.0-1.6)	1.61 (0.85-2.98)	20.9 (11.1-38.7)	1.18 (0.62-2.18)	15.3 (8.1-28.3)	5.7 (3.0-10.5)	71
SBP 143-154 mmHg	5.8 (5.0-6.6)	2.27 (1.76-2.90)	131.7 (102.1-168.2)	1.66 (1.28-2.12)	96.1 (74.5-122.8)	35.5 (27.6-45.4)	50
SBP ≥ 155 mmHg	5.7 (5.1-6.4)	2.79 (2.34-3.31)	159 (133.4-188.7)	2.04 (1.71-2.42)	116.1 (97.4-137.7)	42.9 (36-50.9)	41

eGFR 20-59 ml/min/1.73m²	2.7 (2.2-3.1)	2.96 (2.30-3.80)	79.9 (62.1-102.6)		2.16 (1.68-2.77)	58.3 (45.3-74.9)	21.6 (16.8-27.7)	38
<p>CHD = coronary heart disease, SBP=systolic blood pressure, SPRINT - Systolic Blood Pressure Intervention Trial, NHANES= National Health and Nutrition Examination Survey Estimated glomerular filtration rate (eGFR) in ml/min/1.73 m² was estimated using the CKD-EPI equation using the serum creatinine; *Calculated by multiplying the hazard for all-cause mortality from SPRINT (0.73) by the number of deaths among the NHANES population meeting the SPRINT eligibility criteria</p>								

Supplemental Table 5. Characteristics of U.S. adults eligible for SPRINT overall and by antihypertensive medication status using NHANES 1999-2006 using a 20 mm Hg higher systolic blood pressure criteria.

Group	Overall (n= 8.29 million)	Taking Antihypertensive Medication (n= 3.62)	Not Taking Antihypertensive Medication (n= 4.67 million)	SPRINT* (n=9,361)
Age, mean (SE), years	71.0 (0.36)	71.2 (0.55)	70.9 (0.49)	67.9 (9.4)
Age group, %				
< 75 years	59.1	59.1	59.2	71.8
≥ 75 years	40.9	40.9	40.8	28.2
Male sex, %	38.3	26.3	47.5	64.4
Race/ethnicity, %				
Non-Hispanic White	80.6	80.0	81.0	57.7
Non-Hispanic black	8.8	10.3	7.6	29.9
Mexican American	3.2	2.7	3.5	NA
Other	7.5	7.0	8.0	1.88
Current smoker, %	13.9	8.8	17.9	13.2
Body mass index, mean (SE)	27.81 (0.20)	28.32 (0.37)	27.42 (0.26)	29.9 (5.7)
Obese, %	28.3	30.6	26.5	NA
eGFR 20 to 59 ml/min/1.73 m², %	20.3	23.8	17.6	28.3
Framingham risk score groups, %				
< 5%	0.0	0.0	0.0	NA
5.0-7.4%	0.0	0.0	0.0	NA
7.5-9.9%	0.6	0.3	0.7	NA
10 - 14.9%	2.0	2.9	1.3	NA
≥ 15%	97.5	96.8	98.0	61.3
History of CHD,%	12.4	18.7	7.6	16.7
Systolic blood pressure, mmHg, %				
≤152	14.0	10.7	16.5	33.5
153 - 164	43.2	46.7	40.5	32.5
≥165	42.8	42.6	43.0	34.0
Education, %				
Less than high school	29.2	27.5	30.6	NA
High school only	30.1	31.4	29.0	NA
More than high school	23.7	24.5	23.1	NA
Completed college	17.0	16.6	17.3	NA
No insurance, %	9.6	6.5	12.0	NA

Numbers in table are expressed as mean (Standard error [SE]) or percentages. Percentages are based on weighted data. CVD - cardiovascular disease, eGFR - estimated glomerular filtration rate, SPRINT - Systolic Blood Pressure Intervention Trial, NHANES= National Health and Nutrition Examination Survey, CHD=coronary heart disease, NA=not applicable.

Obesity defined as body mass index ≥ 30.0 kg/m². Framingham risk score was calculate using the using the equation for general clinical practice.¹ Use of antihypertensive medication was defined by self-report and report of taking one or more classes of antihypertensive medication identified through the pill bottle review.

*Baseline characteristics from SPRINT are shown for comparisons (mean and standard deviation are shown for age and body mass index).

Supplemental Table 6. Observed and predicted annual mortality if SPRINT is fully implemented among NHANES participants who meet the SPRINT eligibility criteria using a 20 mm Hg higher systolic blood pressure criteria.

	SPRINT-eligible U.S. adults in millions (95%CI)	Observed annual mortality among SPRINT-eligible NHANES participants		Predicted annual mortality if SPRINT fully applied		Deaths Prevented if SPRINT fully applied, thousands (95%CI)	Number needed to treat (for 3.26 years)
		% (95%CI)	No. per year, thousands (95%CI)	% (95%CI)	No. per year, thousands (95%CI)*		
Overall	8.3 (7.4-9.2)	2.80% (2.47%-3.18%)	232.4 (205.0-263.9)	2.04% (1.80%-2.32%)	169.7 (149.7-192.7)	62.7 (55.4-71.3)	41
Sex							
Men	3.2 (2.7-3.7)	3.78% (3.16%-4.51%)	121.0 (101.1-144.3)	2.76% (2.31%-3.29%)	88.3 (73.8-105.4)	32.7 (27.3-39.0)	30
Women	5.1 (4.5-5.8)	2.20% (1.73%-2.78%)	112.2 (88.2-141.8)	1.61% (1.26%-2.03%)	81.9 (64.4-103.5)	30.3 (23.8-38.3)	52
Age Group							
< 75 years	4.9 (4.3-5.5)	1.58% (1.24%-2.06%)	77.4 (60.8-100.9)	1.15% (0.91%-1.50%)	56.5 (44.4-73.7)	20.9 (16.4-27.3)	72
≥ 75 years	3.4 (2.9-3.9)	4.54% (3.89%-5.30%)	154.4 (132.3-180.2)	3.31% (2.84%-3.87%)	112.7 (96.5-131.5)	41.7 (35.7-48.7)	25
Race/ethnicity							
Non-Hispanic White	6.7 (5.7-7.7)	2.73% (2.37%-3.14%)	182.9 (158.8-210.4)	1.99% (1.73%-2.29%)	133.5 (115.9-153.6)	49.4 (42.9-56.8)	42
Non-Hispanic Black	0.7 (0.7-0.9)	2.97% (1.97%-4.39%)	20.8 (13.8-30.7)	2.17% (1.44%-3.20%)	15.2 (10.1-22.4)	5.6 (3.7-8.3)	38
Mexican American	0.3 (0.2-0.4)	2.31% (1.26%-4.13%)	6.9 (3.8-12.4)	1.69% (0.92%-3.01%)	5.1 (2.8-9.0)	1.9 (1.0-3.3)	49
Other	0.6 (0.4-0.9)	3.63% (3.17%-6.19%)	21.8 (19-37.1)	2.65% (2.31%-4.52%)	15.9 (13.9-27.1)	5.9 (5.1-10.0)	31
History of CHD	1.0 (0.8-1.3)	4.50% (3.17%-6.30%)	45.0 (31.7-63)	3.29% (2.31%-4.60%)	32.9 (23.1-46.0)	12.2 (8.6-17.0)	25
Baseline SBP							
SBP ≤152 mmHg	1.2 (1.0-1.4)	2.66% (2.18%-3.29%)	31.9 (26.2-39.5)	1.94% (1.59%-2.40%)	23.3 (19.1-28.8)	8.6 (7.1-10.7)	43
SBP 153-164 mmHg	3.6 (2.9-4.2)	2.68% (1.90%-3.79%)	96.5 (68.4-136.4)	1.96% (1.39%-2.77%)	70.4 (49.9-99.6)	26.0 (18.5-36.8)	42
SBP ≥ 165 mmHg	3.6 (3.1-4.0)	2.96% (2.37%-3.69%)	106.6 (85.3-132.8)	2.16% (1.73%-2.69%)	77.8 (62.3-97)	28.8 (23.0-35.9)	38
eGFR 20-59 ml/min/1.73m²	1.7 (1.3-2.1)	3.23% (2.50%-4.14%)	54.9 (42.5-70.4)	2.36% (1.83%-3.02%)	40.1 (31-51.4)	14.8 (11.5-19.0)	35

CHD = coronary heart disease, SBP=systolic blood pressure, SPRINT - Systolic Blood Pressure Intervention Trial, NHANES= National Health and Nutrition Examination Survey. Estimated glomerular filtration rate (eGFR) in ml/min/1.73 m² was estimated using the CKD-EPI equation using the serum creatinine;

*Calculated by multiplying the hazard ratio for all-cause mortality from SPRINT (0.73) by the number of deaths among the NHANES population meeting the SPRINT eligibility criteria

Supplemental Table 7. Observed and predicted new cases of heart failure annually if SPRINT-based SBP goals are fully implemented among NHANES participants who meet the SPRINT eligibility criteria overall and in subgroups.

	SPRINT-eligible U.S. adults in millions (95%CI)	No. of New Heart Failure Cases Expected (95%CI), thousands/year				HF Cases Prevented (95%CI), thousands/year		
		Standard SBP Treatment	Intensive SBP Treatment			Point Estimate HR 0.62	Lower 95%CL HR 0.45	Upper 95%CL HR 0.84
			Point Estimate HR 0.62	Lower 95%CL HR 0.45	Upper 95%CL HR 0.84			
Overall	18.1 (16.4-19.8)	121.3 (109.9-132.7)	75.2 (68.1-82.2)	54.6 (49.4-59.7)	101.9 (92.3-111.4)	46.1 (41.8-50.4)	66.7 (60.4-73.0)	19.4 (17.6-21.2)
Sex								
Men	9.7 (8.7-10.8)	65.0 (58.3-72.4)	40.3 (36.1-44.9)	29.2 (26.2-32.6)	54.6 (49.0-60.8)	24.7 (22.2-27.5)	35.7 (32.1-39.8)	10.4 (9.3-11.6)
Women	8.4 (7.4-9.3)	56.3 (49.6-62.3)	34.9 (30.7-38.6)	25.3 (22.3-28)	47.3 (41.6-52.3)	21.4 (18.8-23.7)	31.0 (27.3-34.3)	9.0 (7.9-10.0)
Age Group								
< 75 years	12.3 (11.2-13.5)	82.4 (75-90.5)	51.1 (46.5-56.1)	37.1 (33.8-40.7)	69.2 (63.0-76.0)	31.3 (28.5-34.4)	45.3 (41.3-49.7)	13.2 (12.0-14.5)
≥ 75 years	5.8 (5.1-6.5)	38.9 (34.2-43.6)	24.1 (21.2-27.0)	17.5 (15.4-19.6)	32.6 (28.7-36.6)	14.8 (13.0-16.5)	21.4 (18.8-24.0)	6.2 (5.5-7.0)
Race/ethnicity								
Non-Hispanic White	15.1 (13.2-16.9)	101.2 (88.4-113.2)	62.7 (54.8-70.2)	45.5 (39.8-51)	85.0 (74.3-95.1)	38.4 (33.6-43.0)	55.6 (48.6-62.3)	16.2 (14.2-18.1)
Non-Hispanic Black	1.3 (1.1-1.6)	8.7 (7.4-10.7)	5.4 (4.6-6.6)	3.9 (3.3-4.8)	7.3 (6.2-9.0)	3.3 (2.8-4.1)	4.8 (4.1-5.9)	1.4 (1.2-1.7)
Mexican American	0.05 (0.04-0.07)	0.3 (0.3-0.5)	0.2 (0.2-0.3)	0.2 (0.1-0.2)	0.3 (0.2-0.4)	0.1 (0.1-0.2)	0.2 (0.1-0.3)	0.1 (0.0-0.1)
Other	1.2 (0.8-1.5)	8.0 (5.4-10.1)	5.0 (3.3-6.2)	3.6 (2.4-4.5)	6.8 (4.5-8.4)	3.1 (2.0-3.8)	4.4 (2.9-5.5)	1.3 (0.9-1.6)
History of CHD	2.2 (1.7-2.6)	14.7 (11.4-17.4)	9.1 (7.1-10.8)	6.6 (5.1-7.8)	12.4 (9.6-14.6)	5.6 (4.3-6.6)	8.1 (6.3-9.6)	2.4 (1.8-2.8)
Baseline SBP								
SBP ≤132 mmHg	1.8 (1.5-2.1)	12.1 (10.1-14.1)	7.5 (6.2-8.7)	5.4 (4.5-6.3)	10.1 (8.4-11.8)	4.6 (3.8-5.3)	6.6 (5.5-7.7)	1.9 (1.6-2.3)
SBP 133-144 mmHg	7.4 (6.7-8.1)	49.6 (44.9-54.3)	30.7 (27.8-33.6)	22.3 (20.2-24.4)	41.6 (37.7-45.6)	18.8 (17.1-20.6)	27.3 (24.7-29.8)	7.9 (7.2-8.7)
SBP ≥ 145 mmHg	8.9 (7.9-9.9)	59.6 (52.9-66.3)	37.0 (32.8-41.1)	26.8 (23.8-29.8)	50.1 (44.5-55.7)	22.7 (20.1-25.2)	32.8 (29.1-36.5)	9.5 (8.5-10.6)
eGFR 20-59 ml/min/1.73 m²	4.1 (3.5-4.7)	27.5 (23.5-31.5)	17.0 (14.5-19.5)	12.4 (10.6-14.2)	23.1 (19.7-26.5)	10.4 (8.9-12.0)	15.1 (12.9-17.3)	4.4 (3.8-5.0)

SBP=Systolic blood pressure, CHD = coronary heart disease, SPRINT - Systolic Blood Pressure Intervention Trial, NHANES= National Health and Nutrition Examination Survey.

Estimated glomerular filtration rate (eGFR) in ml/min/1.73 m² was estimated using the CKD-EPI equation using the serum creatinine.

The annual number of new heart failure cases expected with standard SBP treatment is calculated by taking the annual rate of rate incident heart failure in SPRINT (0.67%/year) by the population size and it's 95% confidence interval overall and within subgroups.

Supplemental Table 8. Analysis of extremes sensitivity analysis for SAEs incurred if SPRINT is fully implemented among NHANES participants who meet the SPRINT eligibility criteria.

	SAEs incurred per year with intensive SBP treatment, thousands (95% confidence interval)*		
	Treatment effect from SPRINT		
	Point Estimate	Lower 95% CL [‡]	Upper 95% CL [‡]
Serious Adverse Events			
Hypotension	56.1 (50.8-61.4)	23.5 (21.3-25.7)	88.7 (80.4-97.0)
Syncope	34.4 (31.2-37.6)	0 (0-0)	68.8 (62.3-75.2)
Electrolyte abnormality	43.4 (39.4-47.5)	6.8 (6.2-7.5)	80.0 (72.5-87.6)
Acute kidney injury or acute renal failure	88.7 (80.4-97.0)	35.9 (32.5-39.2)	141.5 (128.2-154.8)
SAEs Possibly of Definitely Related to the Intervention			
Hypotension	54.3 (49.2-59.4)	22.0 (19.9-24.0)	86.6 (78.5-94.8)
Syncope	45.3 (41.0-49.5)	13.0 (11.8-14.2)	77.5 (70.2-84.8)
Electrolyte abnormality	27.2 (24.6-29.7)	0 (0-0)	54.3 (49.2-59.4)
Acute kidney injury or acute renal failure	67.0 (60.7-73.3)	27.1 (24.5-29.6)	106.9 (96.8-116.9)

SBP= systolic blood pressure, SAE = serious adverse event, SPRINT=Systolic Blood Pressure Intervention Trial, CL=Confidence limit, NHANES= National Health and Nutrition Examination Survey.

*Calculated by multiplying the risk difference for each SAE by 18,100,000 and its 95%CI (16,400,000-19,800,000) which is the number of U.S. Adults meeting the sprint eligibility criteria from 1999-2006. [‡]Confidence limits for the SAEs from SPRINT were calculated from the p value reported in SPRINT for each SAE and are shown in Supplemental Table 5.

Acute kidney injury or acute renal failure was defined in SPRINT as an event that occurred during a hospitalization and were reported in the hospital discharge summary as a primary or main secondary diagnosis.

An SAE was defined in SPRINT as an event that was fatal or life-threatening, that resulted in clinically significant or persistent disability, that required or prolonged a hospitalization, or that was judged by the investigator to represent a clinically significant hazard or harm to the participant that might require medical or surgical intervention to prevent another SAE

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