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Supplemental Methods

Text A. Systematic Review and Meta-analysis on Effect Sizes of Produce Prescription Programs.

The intervention effects on dietary habits, BMI, and HbA1c were estimated based on meta-analyses of 20 produce prescription interventions. We focus on programs that evaluated the impact of continued fruit and vegetable prescriptions over an extended period (more than three months) on fruit and vegetable intake, BMI, and HbA1C. A total of 20 produce prescription intervention programs were identified, including 11 studies in a recent systematic review, 6 more studies from our recent published analysis of completed produce prescription programs, and 3 more studies identified through Pubmed searches after the screening date of the systematic review. Among the eligible studies, most (17 of 20) enrolled adults with poor cardiometabolic health including diabetes or prediabetes, hypertension, CVD, obesity, or overweight. All programs enrolled participants who were food insecure or at high risk for food insecurity, with a weighted average of 74% being food insecure. In addition, all 10 programs that assessed the effect on HbA1c were implemented among diabetes patients, with 79% being food insecure. The average age of participants across all programs was 54 years, with 69% female, 38.5% non-Hispanic Black adults, and 30.0% Hispanic adults. This population was a bit younger and had a higher percentage of females and non-Hispanic Black individuals than the national population with diabetes and food insecurity from NHANES, where the average age was 58 years, 55.5% were female, and 17% were non-Hispanic Black.

Study-specific effect estimates were pooled using random-effects meta-analysis. The I^2 statistic was used to assess the heterogeneity of included studies, with values <25%, 25 to 50%, and >50% corresponding to low moderate, and high degrees of heterogeneity, respectively. A high level of heterogeneity was observed for fruit and vegetable intake, and HbA1c level (I2>90%), and for BMI, a low level of heterogeneity (I2=22%). Multiple factors could influence the effect size of the produce prescription programs, including inclusion criteria, the dollar amount of food vouchers or food boxes, sample size, duration of the study period, and factors that could hardly be quantified, such as nutrition education provided, and convenience for accessing the fruits and vegetable purchase point. Due to the small number of studies included for each outcome (13 studies for fruits and vegetable intake, 9 studies for BMI, and 10 studies for HbA1c), and various study quality, we had little confidence in teasing out the possible impact of different component of produce prescription and therefore focused on evaluating the average effects across studies.

Based on the weighting factors for each study generated in the meta-analysis, we calculated the weighted mean of the dollar amounts of produce prescriptions provided and average dollar amounts redeemed per capita.

Table A1. Estimated Effect Size and Costs of Produce Prescription Program for Diabetes.

Intervention effects	Value (95%CI)
Fruit & vegetable intake, servings/day	0.80 (0.45-1.15)
BMI, kg/m^2	0.36 (0.16 to 0.55)
HbA1c, %	0.63 (0.28-0.98)
Intervention costs, per person per year (2021 $)	
Food costs	$382 (52.8)
Administrative costs,	
First-year	$191 (26.4)
Following years	$57 (7.92)

Text B. Estimation of Administrative Costs of National Produce Prescription Program

We estimated the administrative costs of the national produce prescription program by reviewing the costs of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and the Supplemental Nutrition Assistance Program (SNAP), each of which provides nutrition assistance for eligible individuals. Both programs provide nutrition education in addition to financial benefits, with WIC required to provide specific types and numbers of nutrition education, and nutrition education being optional in SNAP with State flexibility. SNAP provides an average monthly benefit of $130 per person for 40 million participants. The administrative costs of SNAP contribute to 5-8% of total program costs according to pre-pandemic program cost data, including State administrative expenses, eligibility certification, nutrition education, employment and training programs, benefit and retailer redemption and monitoring, payment accuracy, EBT Systems, program evaluation and modernization, program access, and health and nutrition pilot projects. WIC provides an average monthly benefit of $61.35 per mother for 6-8 million participants each year. After excluding a minority of administrative costs related to breastfeeding promotion and education (about 1.8% of total program costs), administrative costs of WIC contribute to about 21.3% of total program costs, including participant eligibility, nutrition education, health care coordination, and referral, drug abuse education, clinic operations, food delivery and warehousing, vendor monitoring, financial management, program integrity, and systems development and operations.

A national produce prescription program may share similar administrative components with both WIC and SNAP on eligibility certification, quality control, employment and training, use of the EBT system or food delivery, benefit and retailer redemption and monitoring, and program evaluation. A national produce prescription program may have greater similarities with WIC than SNAP, as WIC includes partnerships with healthcare organizations and has higher intensity and consistency of nutritional education. Still, the administrative burden and costs could be lower in a national produce prescription program than in WIC, as the former provides only produce rather than multiple categories of foods, does not require income certification, and does not need to establish separate clinical institutions (WIC clinics). We assumed that the administrative costs of a national produce prescription program would be 15% of total program costs, about 2-3-fold higher than the administrative costs of SNAP and one-third lower than the administrative costs of WIC. In sensitivity analysis, we evaluated alternative administrative costs of 8% (upper end of SNAP costs) and 21.3% (WIC costs). We also assumed the costs to be higher in the first year of implementation due to program launching, equal to 50% of food costs (33% of total program costs).

Text C. Predicting Healthcare Costs across US Payers and Regions.

The simulation model utilized a de novo prediction algorithm to estimate annual healthcare costs for each individual based on their unique characteristics, including demographics (age, sex, race/ethnicity) and prevalent health conditions (BMI, diabetes, hypertension, coronary heart disease, and stroke). To derive the cost prediction model, we used data from the 2017 to 2022 cycles of Medical Panel Expenditure Survey (MEPS), a national representative survey of healthcare utilization and associated costs among the non-institutionalized U.S. population. [1] We excluded cycle 2020 due to the potential impact of COVID 19 on healthcare utilization. The final sample include 107,212 individuals, representing a weighted non-institutionalized population of 252 million U.S. adults aged 18 and above. MEPS captures data on participants' total annual health care spending from office-based visits, hospital outpatient visits, emergency room visits, inpatient hospital stays, prescription drugs, dental visits, and home care. The costs were reported as the sum of direct payments from all parties (out-of-pocket, private insurers, government, and other payers) for care provided during the year [2], obtained through a combination of self-reports of utilization by patients and validations of these reports by payers.

To derive parameters for cost prediction algorithm, a two-part model was used to model per-person incremental annal total healthcare spending based each diet-related chronic condition, including excess BMI, diabetes, coronary heart disease, and stroke, incurred by each category of payer (private, Medicare, Medicaid or other government insurance, none-insured), and geographic region (Northeast, Midwest, South, West). The first part predicts the probability that a person would incur any medical costs. The second part of the models used a generalized linear model with a gamma distribution and log link to predict the total annual medical expenditure among those who incurred any medical costs. The regression models included the following variables: age, sex, race/ethnicity (Non-Hispanic White, Non-Hispanic Black, Hispanic, Others), and indicators of health conditions including BMI, diabetes, high blood pressure, coronary heart disease, strokes, based on inclusion in the microsimulation model. Based on the fitted two-part model, the average marginal effects were estimated to quantify the incremental changes in healthcare expenditures associated with each predictor (changes in one unit of predictors), for each payer group, and geographic regions separately. Survey design was applied to get national representative estimates.

Model specification:
Part 1: p(totexp>0)= c.age+i.female +i.RE_group+ c.BMI +i.DM+ i.HBP + i.CHD+ i.stroke
Part 2: totexp= c.age+i.female +i.RE_group+ c.BMI +i.DM+ i.HBP + i.CHD+ i.stroke

Table C1. Estimated Marginal Effect of Individual Risk Factors on Total Annual Healthcare Expenditure among US Adults Aged 40 years + (2023 USD)

	Incremental Health Care Expenditure (Standard Error), $				
	Overall	**Private**	**Medicare**	**Medicaid**	**No insurance**
Baseline	4903(192)	4683(232)	4617(643)	13949(1167)	1552(268)
Age	161(12)	176(15)	166(52)	-139(38)	11(17)
Female	1754(293)	2094(357)	517(877)	830(704)	533(284)
BMI	90(21)	75(30)	128(48)	98(35)	-2(22)
Black vs white	-1974(579)	-1892(787)	-1091(1184)	-2178(846)	-1768(469)
Hispanic vs white	-392(457)	-2744(617)	-3662(968)	-3537(807)	-1853(388)
Other vs white	-315(574)	-2937(729)	-2690(1494)	-3792(862)	-1236(686)
HBP	2900(325)	2693(404)	2814(990)	2190(765)	1425(322)
Diabetes	5632(412)	4833(518)	5026(884)	6561(782)	4159(1291)
CHD	6251(485)	6541(718)	4677(1360)	6926(832)	2062(981)
Stroke	5600(660)	6015(1125)	5451(1860)	5990(958)	-49(451)
Northeast					
Baseline	5372(299)	5686(302)	4943(480)	7161(601)	1228(159)
Age	173(13)	130(14)	127(16)	148(15)	59(8)
Female	1928(331)	1838(325)	1890(321)	2159(366)	992(154)
BMI	99(24)	90(24)	86(23)	101(26)	38(10)
Black vs white	-1957(627)	-1869(623)	-1992(592)	-2245(702)	-1117(265)
Hispanic vs white	-4253(489)	-3629(496)	-3605(488)	-4178(579)	-1730(285)
Other vs white	-3462(607)	-3399(603)	-3352(586)	-3896(683)	-1583(284)
HBP	2392(811)	2689(791)	3125(1409)	1044(1019)	1515(631)
Diabetes	7319(903)	6919(941)	7293(1329)	8257(1163)	7163(2376)
CHD	7476(1193)	8736(1381)	6418(1809)	6845(1263)	4078(2194)
Stroke	5476(1173)	6925(1516)	6599(2573)	4660(1316)	-299(1059)
Midwest					
Baseline	5239(327)	5669(358)	5029(444)	7210(602)	1337(166)
Age	163(13)	123(14)	120(15)	140(14)	55(8)
Female	1773(308)	1698(308)	1739(302)	1986(348)	885(136)
BMI	94(22)	86(22)	83(21)	97(25)	36(10)
Black vs white	-1763(596)	-1692(599)	-1795(570)	-2020(678)	-973(246)
Hispanic vs white	-3946(470)	-3408(479)	-3387(467)	-3920(563)	-1593(258)
Other vs white	-3236(584)	-3205(587)	-3163(569)	-3672(668)	-1466(264)
HBP	3214(709)	3489(785)	3796(1214)	1959(900)	1634(615)
Diabetes	5480(912)	5027(964)	5562(1256)	6196(1173)	6701(2255)
CHD	5251(1018)	6237(1114)	4355(1825)	4311(1158)	3145(1932)
Stroke	5530(1586)	6909(1865)	6472(2687)	4513(1744)	-642(960)
South					
Baseline	4323(212)	4901(244)	4233(363)	6153(446)	1030(125)
Age	149(12)	114(13)	111(14)	130(14)	50(7)
Female	1683(273)	1622(279)	1662(274)	1900(311)	841(124)
BMI	85(20)	79(21)	76(20)	89(23)	33(9)
Black vs white	-1725(533)	-1650(547)	-1750(518)	-1977(613)	-939(223)
Hispanic vs white	-3687(420)	-3195(439)	-3166(429)	-3669(510)	-1476(238)
Other vs white	-2994(515)	-2992(529)	-2944(512)	-3421(597)	-1353(238)
HBP	3011(472)	3134(528)	3486(1003)	1809(706)	1605(508)
Diabetes	5119(606)	4697(612)	5162(1064)	5738(887)	5880(2016)
CHD	6082(706)	7092(908)	5132(1570)	5410(837)	3306(1749)
Stroke	5309(885)	6458(1244)	6129(2163)	4379(1020)	-324(809)
West					
Baseline	5079(308)	5479(333)	4819(463)	6939(563)	1244(155)
Age	164(13)	123(14)	120(16)	140(15)	55(8)
Female	1797(307)	1721(307)	1765(302)	2011(343)	912(137)

	Incremental Health Care Expenditure (Standard Error), $				
	Overall	**Private**	**Medicare**	**Medicaid**	**No insurance**
BMI	94(22)	86(23)	82(22)	96(25)	36(10)
Black vs white	-1799(597)	-1728(598)	-1839(568)	-2065(672)	-1016(245)
Hispanic vs white	-3983(463)	-3428(475)	-3406(466)	-3934(549)	-1613(257)
Other vs white	-3257(578)	-3219(581)	-3174(564)	-3678(652)	-1480(260)
HBP	3045(681)	3380(709)	3702(1213)	1875(886)	1638(549)
Diabetes	5586(867)	4947(950)	5403(1215)	6010(986)	6210(2138)
CHD	6705(1048)	7751(1173)	5697(1761)	5872(1199)	3779(2043)
Stroke	6370(1704)	7420(2029)	7002(2499)	5116(1577)	-310(978)

For event and procedure-specific costs, we estimated average total payments across the relevant diagnosis-related group (DRG) from the Medicare Inpatient Prospective Payment data [3]. We calculated weighted average total payments based on the number of total discharges across relevant DRGs.

Table C2. Event and Procedure Specific Costs Estimated from the Medicare Inpatient Prospective Payment Data

Disease (DRG code)	Total Discharges	Weighted Average Total Payments, $
Stroke (061 – 063)	2697	$19266
Acute Myocardial infarction (280 – 283)	119122	$12580
Coronary artery bypass surgery (231 -234)	13425	$54767
Percutaneous Coronary Intervention (246-251)	46,390	$21146

Data Source: CMS Medicare Provider Analysis and Review (MEDPAR) inpatient data which contains discharge information for 100% of Medicare fee-for-service beneficiaries using hospital inpatient services [3].

Since the cost prediction algorithm of DOC-M does not intrinsically capture the influence of HbA1c changes in the medical costs of diabetes, we further incorporated additional HbA1c-related cost savings in the model. HbA1c is recognized as an important predictor of healthcare costs for diabetes patients, independent of multiple diabetes comorbidities such as CVD and hypertension. Patients with good glycemic control were less likely to treat their diabetes with medication and less likely to be prescribed insulin, and are associated with a reduced risk of diabetes-related complications including microvascular (neuropathy, retinopathy, and nephropathy) and macrovascular (CHD and stroke) complications. We assumed that improved HbA1c could reduce health care costs for diabetes patients by reducing costs of diabetes treatment such as diabetes medications, physician visits, and self-testing devices, [51] and costs related to treating microvascular complications (neuropathy, retinopathy, and nephropathy), [52-54] and macrovascular complications (CHD and stroke). To avoid double-counting for the savings of healthcare expenditures related to CVD outcomes, which have already been captured by the fruit and vegetable and BMI pathway, we restricted our estimation to non-CVD-related healthcare costs. To identify the best available evidence for HbA1c reduction on diabetes-related health care costs, we systematically reviewed studies assessing the impact of HbA1c reduction on diabetes-related health care costs in the US from 2000 through now. Despite diverse data sources, and the scope of healthcare costs, all studies suggested reducing HbA1c is associated with reduced healthcare costs.

We used the evidence from the study by Maureen et al 2020, the most recent available data that provided the cost estimation related to HbA1c reduction. The study suggested that a 1 percentage point reduction in HbA1c was associated with a 13% reduction (or a $736 reduction) in diabetes-related healthcare costs, independent of comorbidity conditions. [55] We assumed that this cost reduction equally applied to both CVD and non-CVD-related diabetes-related costs.

The DOC-M predicts the marginal effect of having diabetes on health care expenditure ($3859.002 per person per year), independent of age, sex, race, CVD, BMI, and blood pressure. The marginal effect of diabetes intrinsically subtracted CVD-related costs from diabetes costs. We estimate that a One percentage point reduction in HbA1c was associated with a 13%*$3859.002 =$501.67 decrease in CVD-independent diabetes-related medical costs per person per year.

Text D. Estimating Productivity Loss Due Morbidity and Premature Mortality Associated with Cardiometabolic Conditions.

The model assessed productivity losses from morbidity and premature mortality related to cardiometabolic conditions such as obesity, diabetes, coronary heart disease (CHD), stroke, and hypertension. Morbidity costs accounted for lost earnings due to illness, encompassing absenteeism for employed individuals and inability to work for the unemployed due to health issues or disability. [4] Mortality costs were calculated using the human capital approach, incorporating lost earnings from premature death in the formal labor market and household productivity. [4]

To determine morbidity costs attributable to cardiometabolic conditions, we analyzed data from the Medical Expenditure Panel Survey (MEPS) cycle 2017-2022. [1] We excluded cycle 2020 due to the potential impact of COVID 19 on productivity. We estimated the likelihood of employment disability associated with each condition and the excess workdays missed due to illness or injury. Employment disability was defined as the inability to work due to illness or disability, without a job to return to. We employed logistic regression to predict disability probability as a function of obesity, diabetes, coronary heart disease (CHD), stroke, and hypertension, adjusting for age, sex, race, education, income, and insurance. Predictive margins from this model quantified the incremental employment disability linked to each cardiometabolic condition (**Table E1**). Similarly, negative binomial regression, also adjusted for relevant factors, estimated the excess missed workdays (absenteeism) due to these conditions. The age- and sex- specific national median weekly wages was utilized to quantify the economic value of lost productivity due to employment disability and absenteeism,[5] further factoring in labor participation rates by age and sex. These figures were derived from the Current Population Survey. [5,6]

For the lost value of labor market productivity due to premature mortality, we estimated age- and sex-specific expected annual earnings from formal labor market per person, by multiplying the median annual earnings among the full-time workers with the probability of full-time employment in each age and sex stratum, obtained from the Current Population Survey (**Table E2**). Additionally, we incorporated benefit costs representing 23.4% of total wages and salaries.[6,7] The total production value in the formal labor market thus comprised expected annual earnings plus the monetary value of benefit costs. For the lost value of household production and caregiving due to premature mortality, we used data from the American Time Use Survey (ATUS) to determine average hours allocated to various activities.[8,9] We then multiplied these hours by age- and sex-specific median hourly earnings to estimate daily household production and caregiving values **(Table E3**).

We did not estimate these costs for adults aged 80 years or older because formal workforce participation in this age group is low.

Table D1. Lost Productivity Associated with Cardiometabolic Conditions

	Excess probability of employment disability*		Excess workdays missed†	
	Estimate	**SE**	**Estimate**	**SE**
Obesity	0.004	0.003	0.658	0.188
Diabetes	0.031	0.003	1.796	0.199
Hypertension	0.034	0.004	1.162	0.294
CHD	0.049	0.006	3.421	0.493
Stroke	0.084	0.009	2.162	0.664

*Estimated from MEPS 2017-2021. A logistic regression model was utilized to predict the probability of employment disability as a function of cardiometabolic conditions (including diabetes, CHD, stroke, and high blood pressure), further adjusting for age, sex, race, education, income, and insurance type. Predictive margins were generated from the multivariable model to estimate the excess probability of employment disability associated with each cardiometabolic condition. Productivity loss associated with obesity was not accounted since it is not significantly associated with employment disability or workdays missed due to health conditions after multivariable adjustment.

*Estimated from MEPS 2017-2021. A negative binomial regression with multivariable adjustment was utilized. The model included all cardiometabolic conditions and adjusted for age, sex, race, education, income, and insurance type

Table D2. Valuing Production Value of Time Spent on Formal Labor Market by Age-Sex Groups

Age Group	Sex	Median Weekly Wages ($)*	Percentage of full-time employment†	Expected Annual Earnings($)‡	Total Production Value in Formal Labor Market#
35 ≤ Age ≤ 44	Male	1364	90	63835	78773
	Female	1136	76	44895	55400
45 ≤ Age ≤ 54	Male	1396	87	63155	77933
	Female	1115	75	43485	53660
55 ≤ Age ≤ 64	Male	1380	71	50950	62872
	Female	1065	60	33228	41003
65 ≤ Age ≤ 74	Male	1181	31	19038	23493
	Female	977	22	11177	13792
Age ≥ 75	Male	1181	11	6755	8336
	Female	977	6	3048	3762

*: Among full-time employed, wage and salary workers. The data represent earnings before taxes and other deductions and include any overtime pay, commissions, or tips usually received among full-time employed, wage and salary workers in 2023, in 2024 dollar. Data Source: Weekly and hourly earnings data from the Current Population Survey, U.S. Bureau of Labor Statistics. June, 2024. Available at https://data.bls.gov/PDQWeb/le

†: Data Source: Civilian labor force 2022 by age, sex, race, and ethnicity U.S. Bureau of Labor Statistics. September, 2022. Available at https://www.bls.gov/emp/tables/civilian-labor-force-summary.htm

‡: Annual earnings were estimated based on 52-weeks of the weekly earnings, multiply by percentage of full-time employment.

#Total Production Value in Formal Labor Market is the sum of expected annual earning and the value of total benefit costs. The value of total benefit costs, including insurance (e.g., life, health, short-term and long-term disability); retirement and savings (e.g., defined benefit and defined contribution); and legally required benefits (e.g., social security, Medicare, federal and state unemployment insurance, and workers' compensation), were 23.4% of the total wages and salaries based on a previous estimation.

Table D3. Measuring and Valuing Mean Time Spent in Household Production and Caregiving

Age Group	Sex	Mean hours per day spent in the following activities (2021 annual averages)*			Median Hourly Earnings (2024 USD)$	Daily Value of Household Production and caregiving (2024 USD)¶
		Household activities†	Caring for household members‡	Caring for non-household members#		
35 ≤ Age ≤ 44	Male	1.53	0.88	0.15	22.9	$51.50
	Female	2.28	1.52	0.13	19.8	$70.00
45 ≤ Age ≤ 54	Male	1.56	0.38	0.09	22.8	$42.00
	Female	2.4	0.45	0.27	19.8	$55.50
55 ≤ Age ≤ 64	Male	1.76	0.1	0.18	23.4	$42.80
	Female	2.53	0.17	0.5	19.8	$55.70
65 ≤ Age ≤ 74	Male	2.27	0.06	0.27	19.6	$45.80
	Female	3.15	0.16	0.3	17.9	$57.00
Age ≥ 75	Male	2.09	0.06	0.13	18.1	$40.10
	Female	2.89	0.12	0.22	17.9	$51.00

* Source: Time spent in primary activities for the civilian population by Age, sex, race, Hispanic or Latino ethnicity, marital status, and educational attainment, 2021 annual averages https://www.bls.gov/news.release/atus.t03.htm

†: Household activities are activities done by individuals to maintain their households. These include housework; cooking; lawn and garden care; pet care; vehicle maintenance and repair; home maintenance, repair, decoration, and renovation; and household management and organizational activities (such as filling out paperwork or planning a party). Food preparation, whether or not reported as done specifically for another household member, is always classified as a household activity unless it was done as a volunteer, work, or income-generating activity.

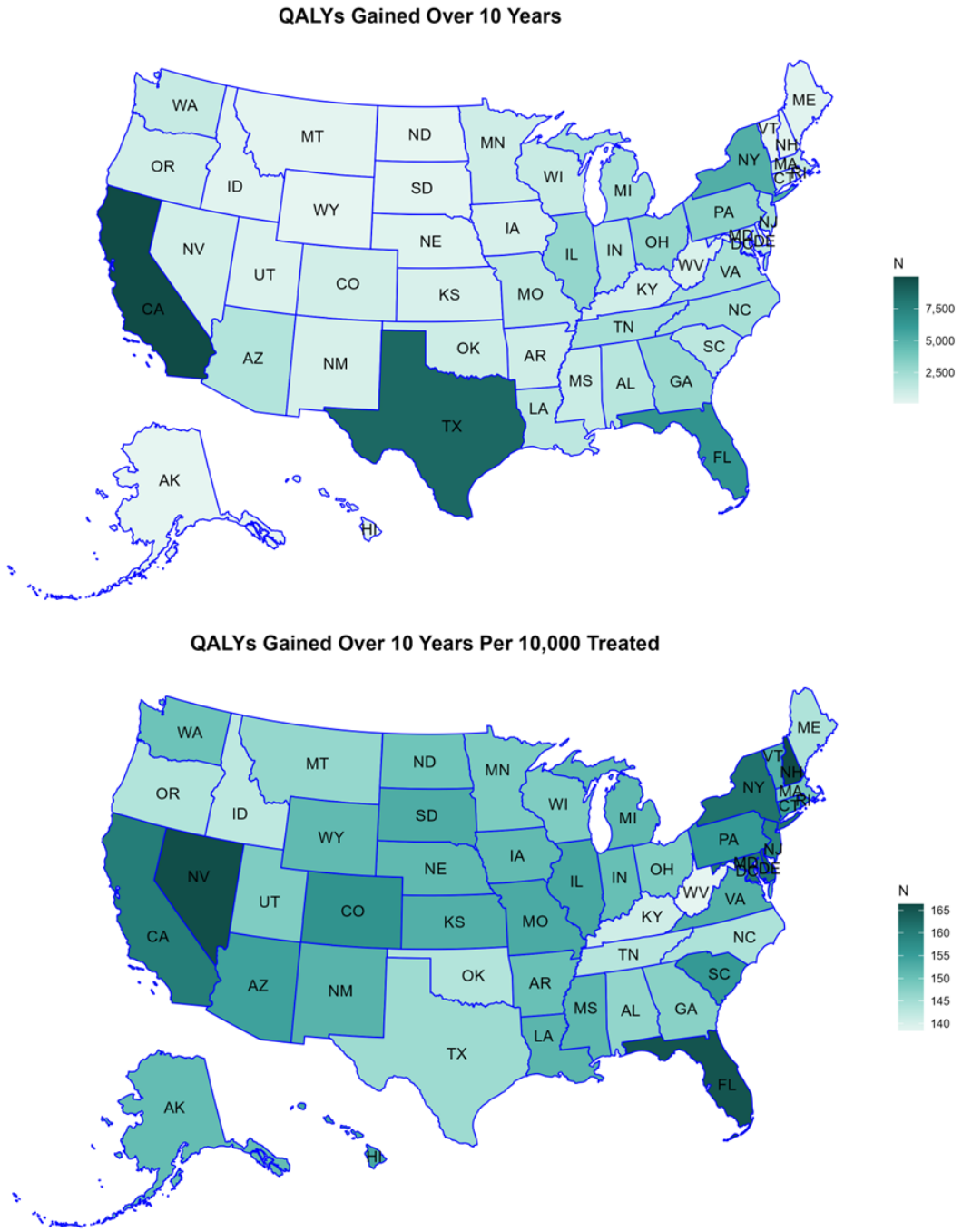
‡: Time spent doing activities to care for or help any child (under age 18) or adult in the household, regardless of relationship to the respondent or the physical or mental health status of the person being helped, is classified here.

#This category includes time spent in activities done to care for or help others--both children (under age 18) and adults--who do not live in the household.

$Among wage and salary workers paid hourly rates. Data Source: Weekly and hourly earnings data from the Current Population Survey, U.S. Bureau of Labor Statistics. June, 2024. Available at https://data.bls.gov/PDQWeb/le

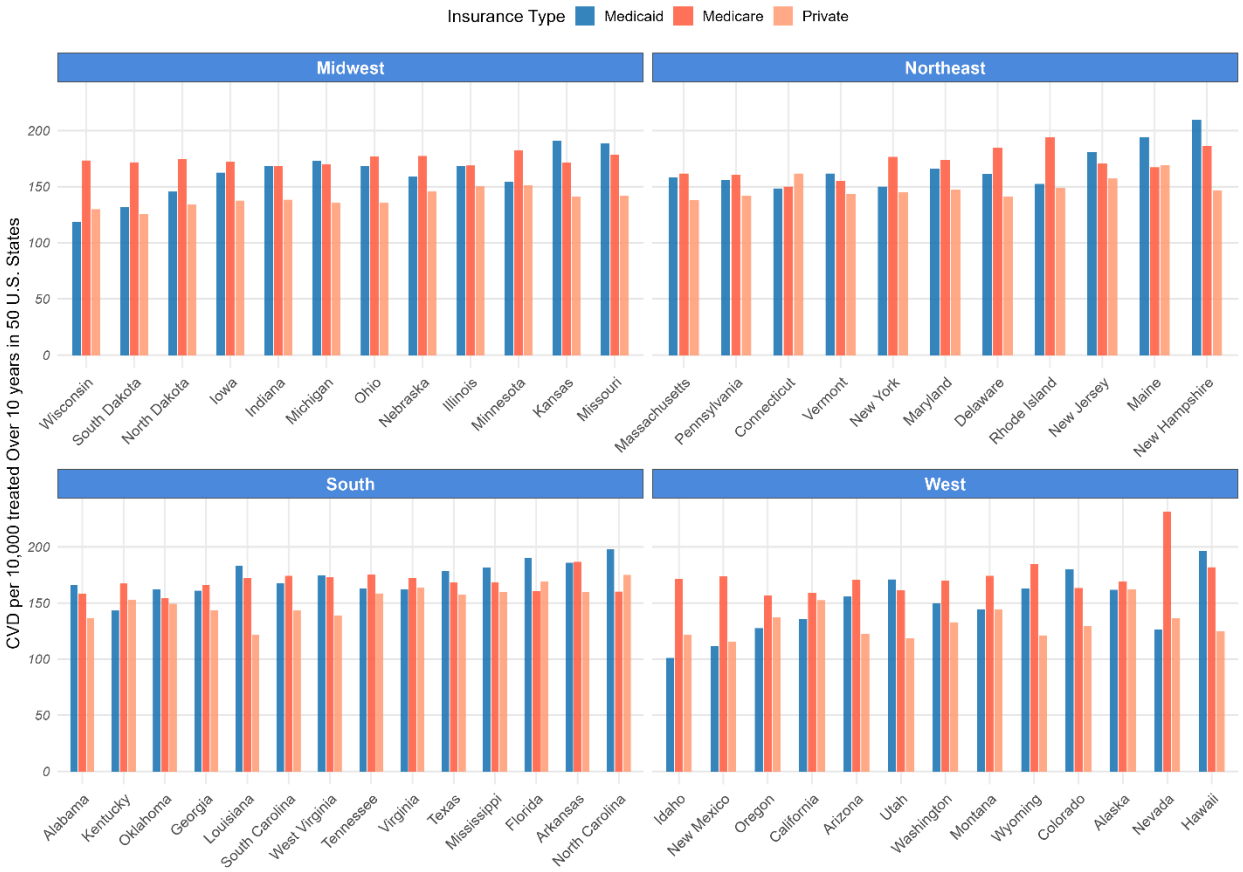
¶Annual value is estimated by multiplying daily value (=mean hours per day * median hourly earning) with 365.

Figure S1. Estimated Number of QALYs Gained by Implementing Produce Prescription Over 10 Years in 50 U.S. States.



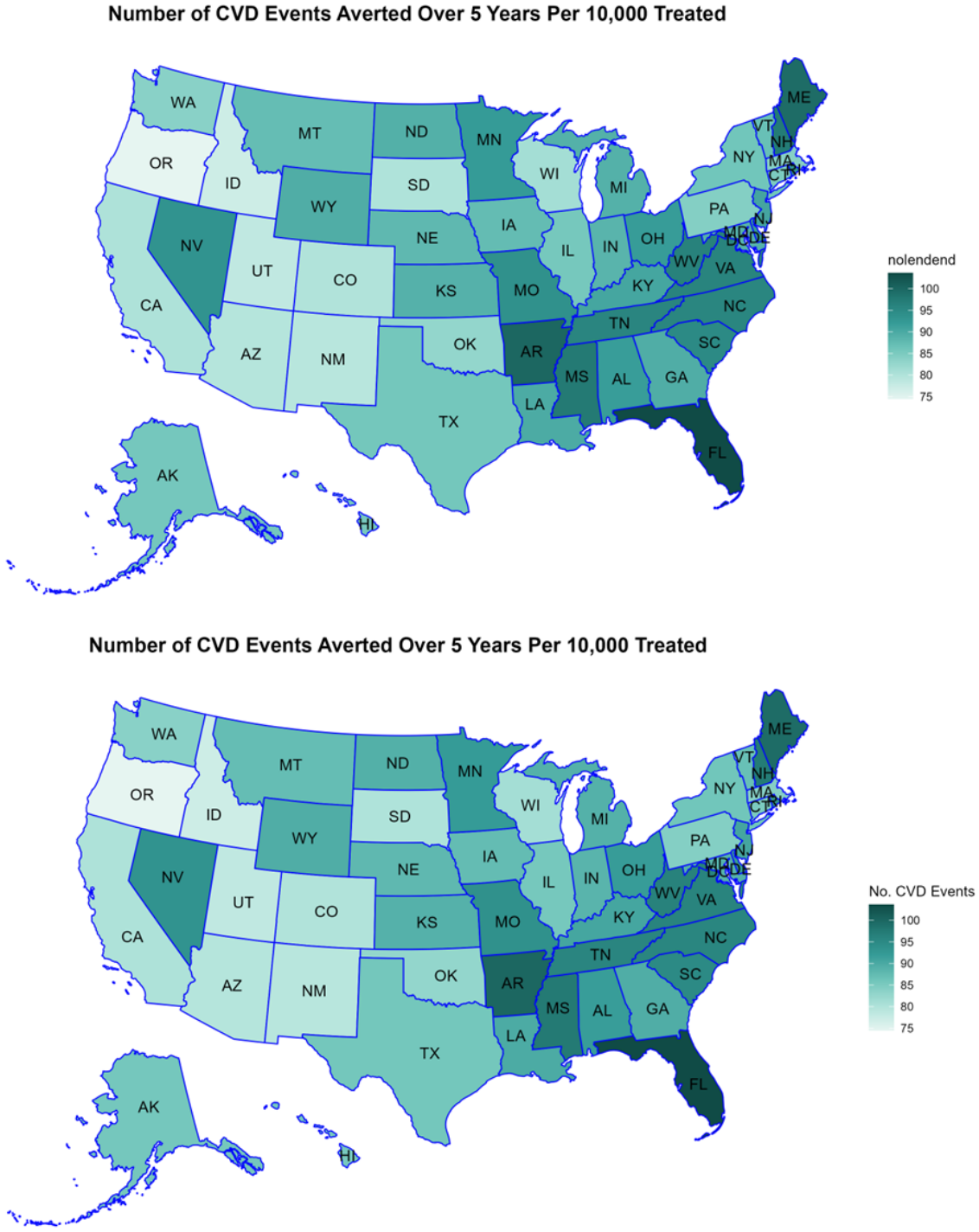
Colors denote the estimated number of Quality Adjusted Life Years (QALYs) gained, displayed as absolute numbers (upper panel) and per 10,000 patients treated (lower panel). Outcomes were derived using a validated microsimulation model applied to state-specific representative samples of adults aged 40–79 years with diabetes and food insecurity at baseline. The intervention involved a produce prescription program integrated into the healthcare system, with eligible patients identified and referred by healthcare providers. Estimates represent the mean values from 1,000 Monte Carlo simulations.

Figure S2. Estimated Number of CVD Events Averted by Produce Prescription Therapy Over 10 Years of Intervention by Baseline Insurance Type in 50 U.S. States.



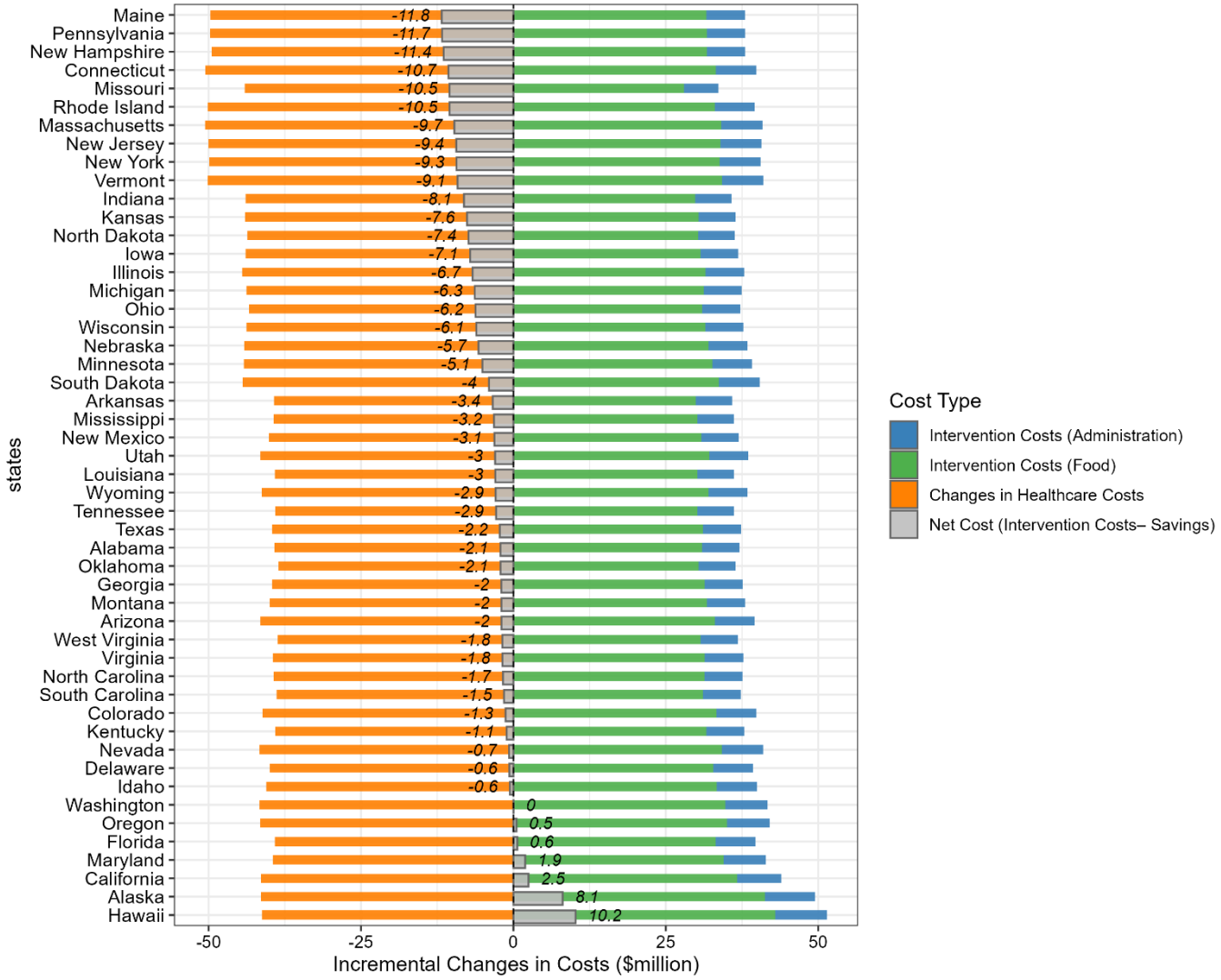
Bars represent the estimated CVD events averted per 10,000 patients treated, stratified by baseline insurance type of participants. Results represent mean values from 1,000 Monte Carlo simulations.

Figure S3. Estimated Number of CVD Events Averted by Produce Prescription Therapy Over 5 Years in 50 U.S. States.



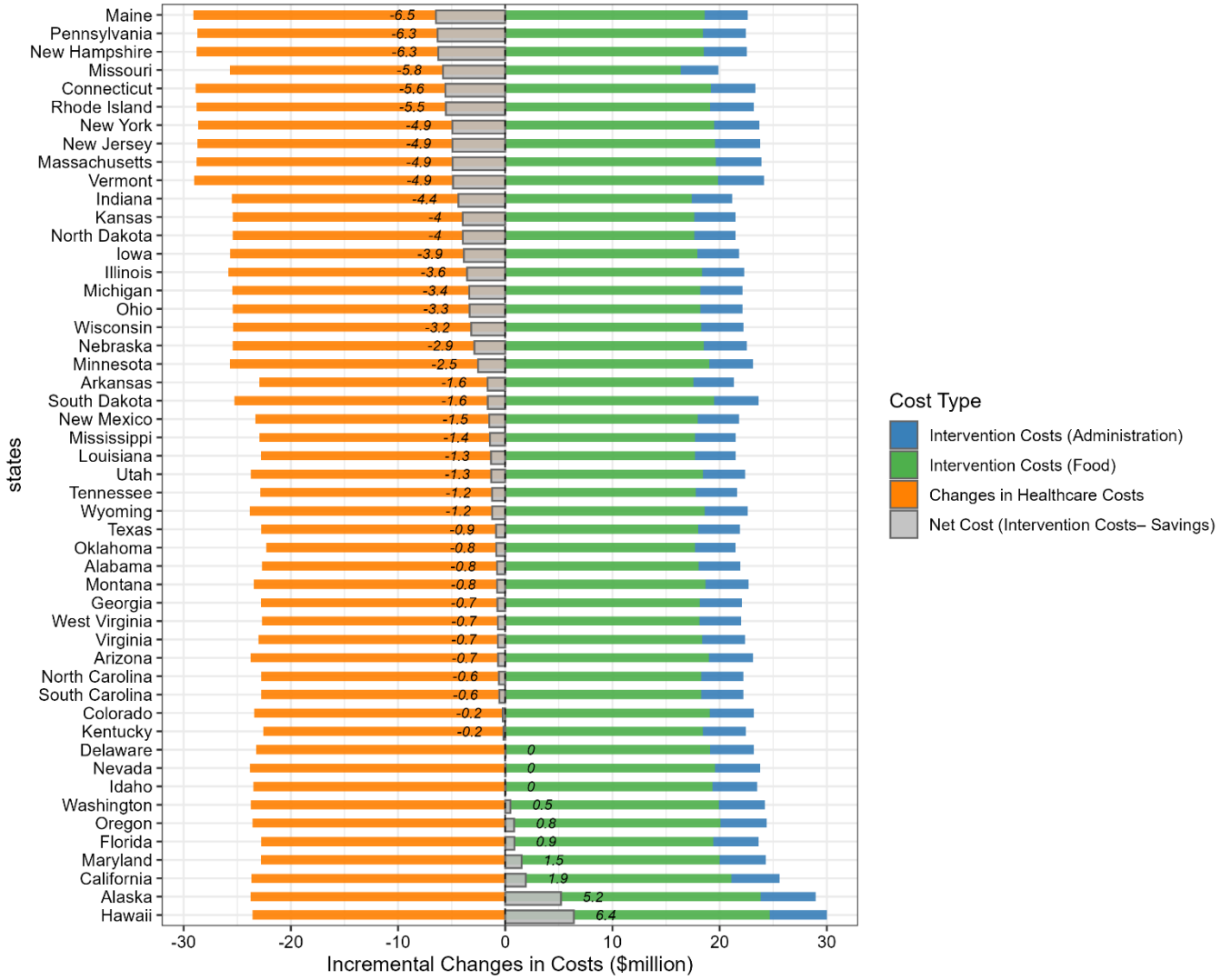
Colors denote the estimated number of cardiovascular disease (CVD) events averted, displayed as absolute numbers (upper panel) and per 10,000 patients treated (lower panel). Estimates represent the mean values from 1,000 Monte Carlo simulations.

Figure S4. Estimated Incremental Changes in Healthcare Costs and Intervention Costs for Produce Prescription Therapy Over 10 Years in 50 U.S. States.



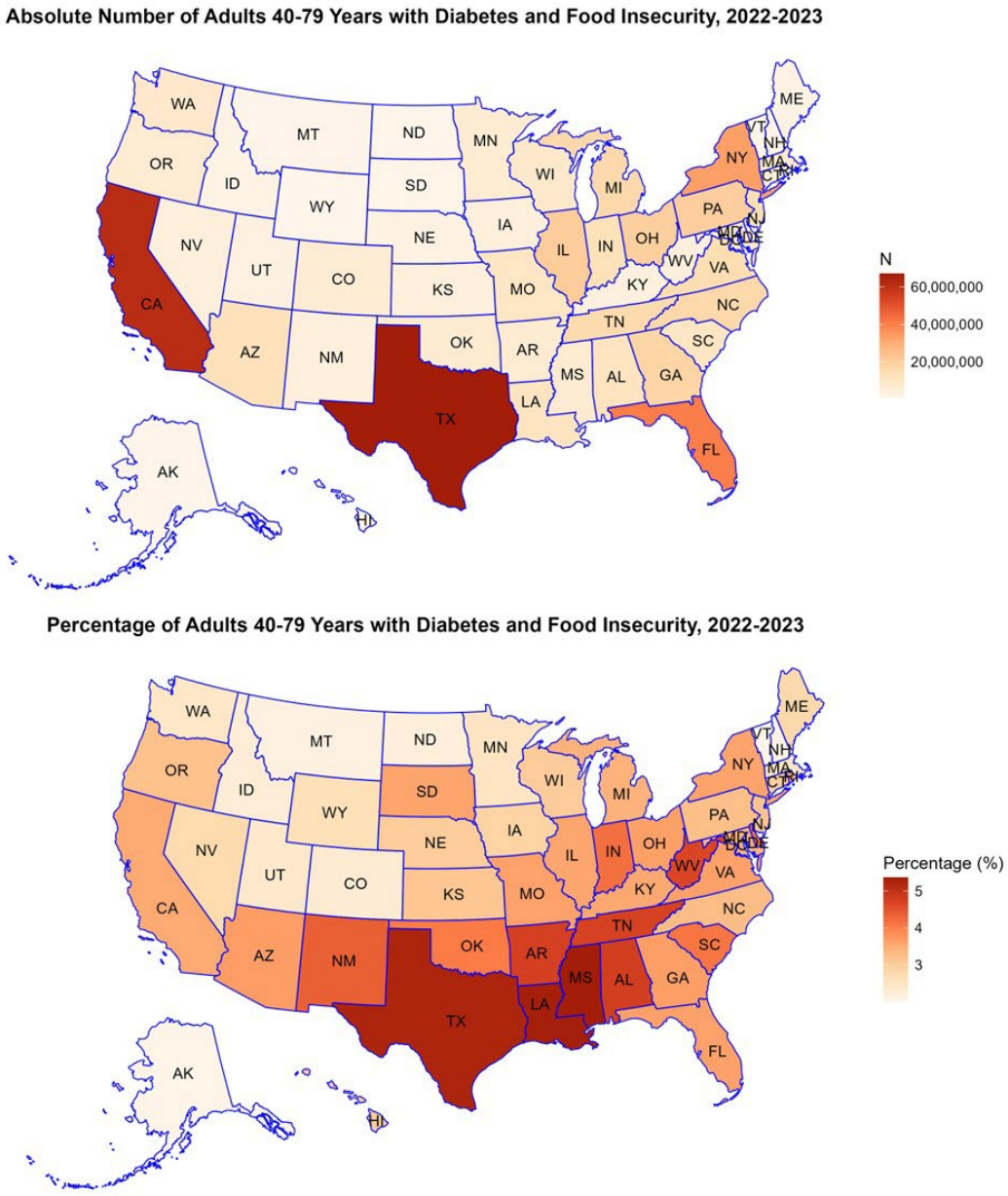
Bars represent the projected changes in healthcare cost, intervention costs, and net costs (grey bar, equal to intervention costs-healthcare cost savings) of produce prescription therapy over 10 years, displayed in per 10,000 treated. Negative values indicate cost savings. All costs are reported in 2023 dollars and discounted at an annual rate of 3%. Estimates represent the mean values from 1,000 Monte Carlo simulations.

Figure S5. Estimated Incremental Changes in Healthcare Costs and Intervention Costs of Produce Prescription Therapy Over 5 Years in 50 U.S. States.



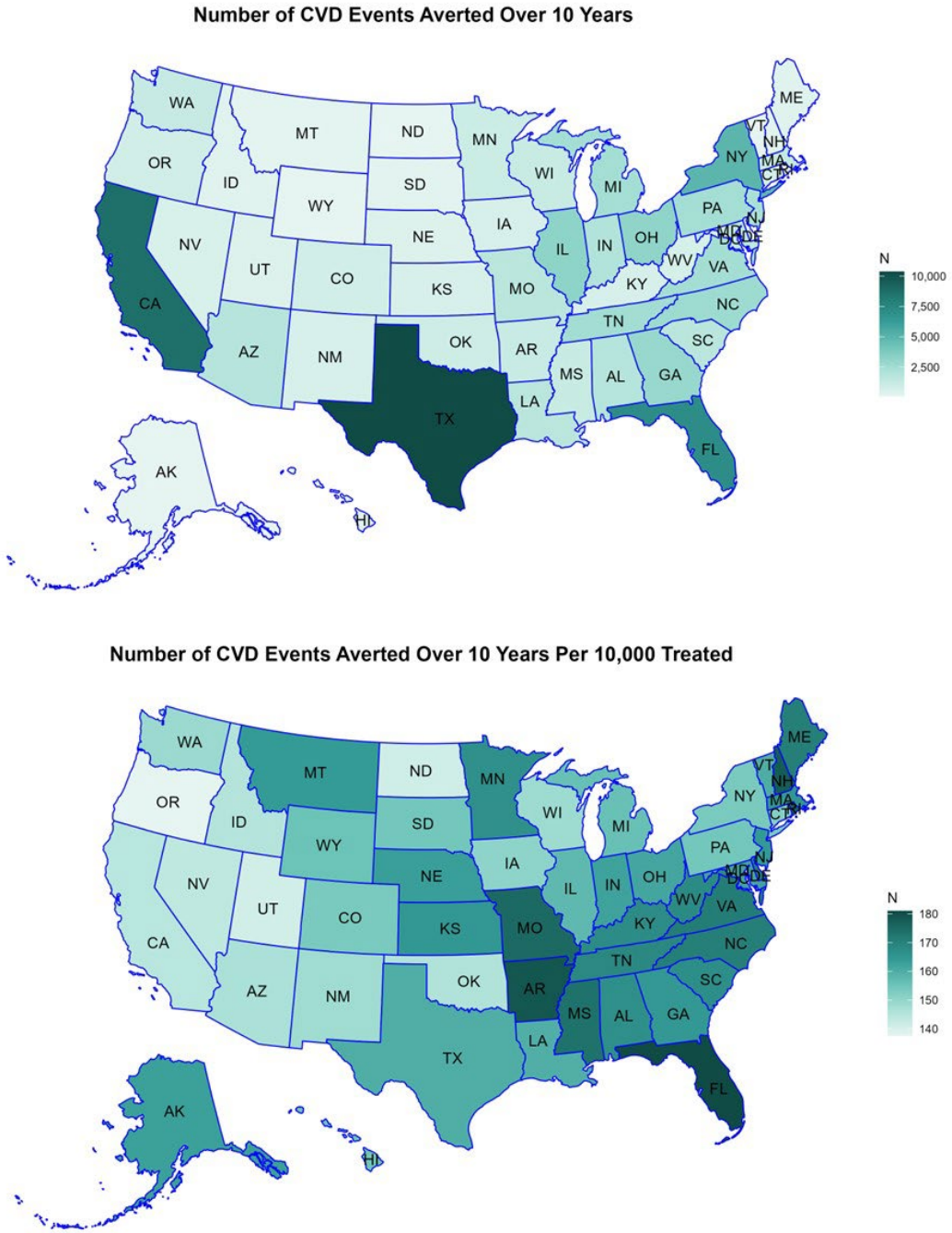
Bars represent the projected changes in healthcare cost, intervention costs, and net costs (grey bar, equal to intervention costs-healthcare cost savings) of produce prescription therapy over 10 years, displayed in per 10,000 treated. Negative values indicate cost savings. All costs are reported in 2023 dollars and discounted at an annual rate of 3%. Estimates represent the mean values from 1,000 Monte Carlo simulations.

Figure S6. Estimated Number and Percentage of Adults Eligible for Produce Prescription Therapy, Sensitivity Analysis Based on 2022-2023 BRFSS



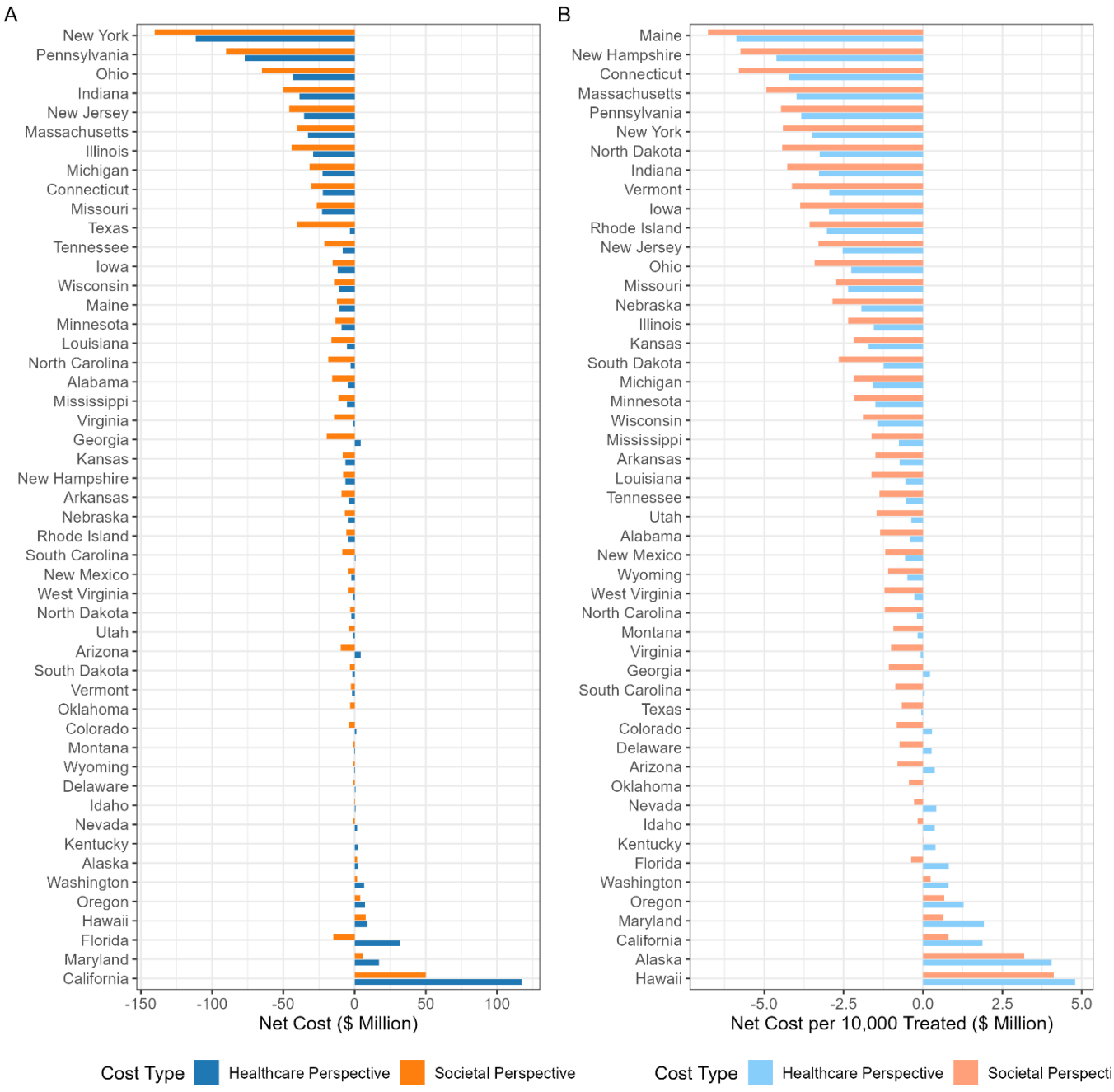
Upper Panel: Colors denote the absolute number of adults in each state eligible for receiving Produce Prescription, **Lower Panel:** Colors denote the percentage of adults in each state eligible for receiving Produce Prescription. Number and percentages were estimated from state-level data from the Behavioral Risk Factor Surveillance System (BRFSS) 2022-2023.

Figure S7. Estimated Number of CVD Events Averted by Produce Prescription Therapy, Sensitivity Analysis Based on 2022-2023 BRFSS



Colors denote the estimated number of cardiovascular disease (CVD) events averted, displayed as absolute numbers (upper panel) and per 10,000 patients treated (lower panel). Estimation were based on state-level model inputs generated from the Behavioral Risk Factor Surveillance System (BRFSS) 2022-2023..

Figure S8. Estimated Net Costs of Produce Prescription Therapy Over 10 Years of Intervention in 50 U.S States, Sensitivity Analysis Assuming 50% Enrollment with Drop Out and Re-enrollments



Bars represent the estimated net changes in costs from a healthcare perspective and a societal perspective, shown in absolute values (left panel), and per 10,000 treated patients (right panel). The analysis assumed 50% of eligible individuals enrolled in the program initially, with a 20% annual dropout rate among participants, and a 20% annual enrollment among eligible non-participants, allowing for re-entry into the program over time. We conservatively assumed that all health benefits would discontinue (i.e., no carry-over benefits) if an individual dropped out PRxs. We also adjusted program implementation costs in this scenario, assuming that 25% of administrative costs remain fixed regardless of enrollment levels, while the remaining 75% scaled proportional with the number of participants. The healthcare perspective included total intervention costs minus healthcare cost-savings. The societal perspective included total intervention costs minus healthcare cost-savings minus savings from averted productivity losses. Negative values indicate cost savings. All costs are expressed in 2023 dollars and discounted at an annual rate of 3%. Results represent mean values from 1,000 Monte Carlo simulations.

Figure S9. Estimated Annual Healthcare Costs Among Patients Eligible for Produce Prescription At Baseline

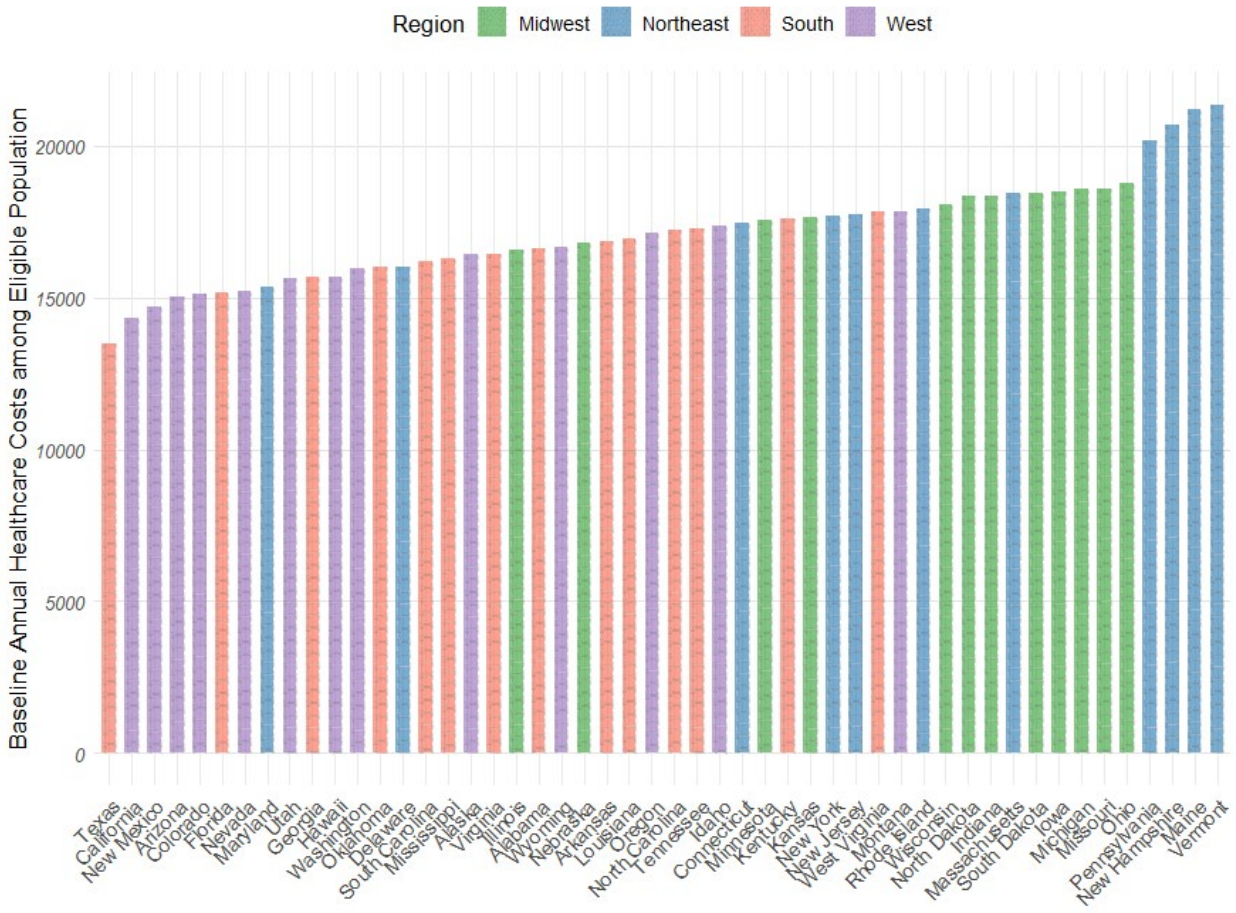


Table S1. Key Model Input Parameters and Data Sources for Projecting Impact of Produce Prescription (PRx) in 50 US States Using DCOM-model.

Model inputs	Methods/Data sources
Baseline characteristics	Individual-level data on demographics, risk factors, and prevalent health conditions of eligible population for each of the 50 US states are obtained from BRFSS 2021 to 2023 (3 cycles), supplemented by NHANES 2013-2020 data to impute missing information on laboratory measurements and food security status (**Table S1**).
Intervention effects	Pooled average effect of PRx on fruit and vegetable intake, BMI, and HbA1c from a total of 20 PRx programs (**Supplemental Methods, Text C**).
Intervention costs	Estimated based on weighted mean food box value or voucher amounts from 20 studies included in the intervention effect size meta-analysis, adjusted for the proportion of fruits and vegetables in the food box (when other items were included) and the actual redemption rates of the vouchers (**Supplemental Methods, Text C**).
Diet-disease etiologic effects	Meta-analysis of randomized trials and prospective cohort studies, Miller et al **2022**. (**Table S2**)
Disease risks	
Initial ASCVD	ACC/AHA 10-year ASCVD risk model
Subsequent CVD	Framingham Heart Study 2-year risk model for subsequent CVD
Cause-specific mortality	State-specific cardiovascular and diabetes mortality rates by age, sex, and race/ethnicity between 2015-2019 were obtained from CDC Wonder. † [10]
Health-related quality of life	An established HRQOL prediction model, [11] and event-specific short-term (one year) decrements in HRQoL for acute CHD (-0.055) or stroke (-0.3). [12]
Healthcare cost	Embedded within DCOM model, updated with newer data.
Individual healthcare costs prediction model	New algorithm was developed based on MEPS data 2017-2022, with methods detailed in **Supplemental Methods, Text D**. All costs were inflated to 2023 dollar.
Event/procedure costs	Updated using Medicare Inpatient Prospective Payment data, 2022. [3] All costs were inflated to 2023 dollar.
Productivity costs	Including costs of lost productivity from morbidity and premature mortality associated with cardiometabolic conditions.[13] Estimation methods are detailed in **Supplemental Methods, Text D.**

Abbreviations: ASCVD, atherosclerotic CVD; ACC/AHA, American College of Cardiology/ American Heart Association; CDC, Centers for Disease Control and Prevention; CVD, cardiovascular disease; DOC-M model: The Diabetes, Obesity, Cardiovascular Disease Microsimulation model; PRx: Produce prescription; BRFSS: Behavioral Risk Factor Surveillance System; NHANES: National Health and Nutrition Examination Survey; MEPS, Medical Expenditure Panel Survey; SE: standard error.

*: Where uncertainty around input parameters (e.g., cost of CABG/PCI) is not available, we assume 20% of the mean estimate as a standard error to generate parameters for probabilistic distributions.

†Aggregated data from the corresponding census region of the state was used instead when the state estimation was judged as un-reliable (i.e., with <16 deaths in the age-sex-race specific category).

Table S2. Estimated Age-Specific Etiologic Effects of Fruits and Vegetables on Cardiometabolic Outcomes*

	Cardiometabolic outcome	Unit of effect	Estimated relative risks (95% CI), by Age					
			25-34y	35-44y	45-54y	55-64y	65-74y	75+y
Fruits	↓ CHD	RR per 100 g/d	0.92 (0.87, 0.97)	0.92 (0.87, 0.97)	0.93 (0.89, 0.97)	0.94 (0.91, 0.98)	0.95 (0.92, 0.98)	0.97 (0.96, 0.99)
	↓ Ischemic stroke		0.83 (0.76, 0.90)	0.83 (0.77, 0.90)	0.86 (0.80, 0.92)	0.88 (0.83, 0.93)	0.9 (0.86, 0.94)	0.94 (0.92, 0.96)
	↓ Hemorrhagic stroke		0.63 (0.49, 0.81)	0.64 (0.5, 0.82)	0.69 (0.56, 0.84)	0.73 (0.61, 0.87)	0.77 (0.67, 0.89)	0.86 (0.8, 0.92)
Vegetables	↓ CHD	RR per 100 g/d	0.93 (0.89, 0.97)	0.93 (0.9, 0.97)	0.94 (0.91, 0.97)	0.95 (0.93, 0.98)	0.96 (0.94, 0.98)	0.98 (0.97, 0.99)
	↓ Ischemic stroke		0.76 (0.64, 0.9)	0.77 (0.66, 0.9)	0.80 (0.7, 0.92)	0.83 (0.74, 0.93)	0.86 (0.78, 0.94)	0.92 (0.87, 0.96)
	↓ Hemorrhagic stroke		0.76 (0.61, 0.95)	0.77 (0.62, 0.95)	0.80 (0.67, 0.96)	0.83 (0.72, 0.96)	0.86 (0.76, 0.97)	0.92 (0.86, 0.97)

Abbreviations: CHD, coronary heart disease; CI, confidence interval; RR, relative risk.

* The detailed methods for reviewing and synthesizing evidence to estimate effect sizes for associations between dietary factors and cardiometabolic endpoints have been reported. [23,24] We utilized evidence from meta-analyses of prospective cohorts or randomized clinical trials evaluating direct associations of dietary factors with coronary heart disease (CHD), stroke, or type 2 diabetes, by age.[2,23,24]

† The available evidence suggests an effect of seafood omega-3 on fatal CHD, with less clear evidence for benefits on nonfatal CHD.[72] Because the risk transitions influenced by diet in the CVD-Predict model are for the incidence of a CHD event, with subsequent transitions to death independent of dietary risk factors (see Fig 1), the current analysis will modestly overestimate the benefits of changes in seafood omega-3 consumption.

Table S3. Population size and Prevalence of Diabetes with Food Insecurity Among Adults 40-79 Years in 50 U.S. States

State	Total population (N)	Population with Diabetes [a]		Population with diabetes and Food insecurity [b]	
		N	%	N	%
California	17,488,000	3,065,000	17.5%	693,000	4.0%
Texas	12,692,000	2,450,000	19.3%	578,000	4.6%
Florida	11,046,000	1,903,000	17.2%	425,000	3.9%
New York	9,218,000	1,540,000	16.7%	321,000	3.5%
Pennsylvania	6,203,000	984,000	15.9%	209,000	3.4%
Illinois	5,808,000	986,000	17.0%	191,000	3.3%
Ohio	5,465,000	1,040,000	19.0%	193,000	3.5%
North Carolina	4,926,000	939,000	19.1%	192,000	3.9%
Georgia	4,865,000	928,000	19.1%	194,000	4.0%
Michigan	4,733,000	805,000	17.0%	149,000	3.1%
New Jersey	4,436,000	686,000	15.5%	146,000	3.3%
Virginia	4,017,000	723,000	18.0%	150,000	3.7%
Washington	3,564,000	510,000	14.3%	85,000	2.4%
Massachusetts	3,333,000	482,000	14.5%	88,000	2.6%
Arizona	3,316,000	588,000	17.7%	132,000	4.0%
Tennessee	3,261,000	699,000	21.4%	153,000	4.7%
Indiana	3,069,000	583,000	19.0%	116,000	3.8%
Maryland	2,913,000	508,000	17.4%	95,000	3.3%
Missouri	2,796,000	507,000	18.1%	105,000	3.7%
Wisconsin	2,775,000	430,000	15.5%	75,000	2.7%
Colorado	2,627,000	333,000	12.7%	56,000	2.1%
Minnesota	2,613,000	375,000	14.3%	65,000	2.5%
South Carolina	2,504,000	509,000	20.3%	102,000	4.1%
Alabama	2,352,000	537,000	22.8%	125,000	5.3%
Louisiana	2,049,000	428,000	20.9%	100,000	4.9%
Oregon	2,029,000	313,000	15.4%	61,000	3.0%
Connecticut	1,749,000	269,000	15.4%	54,000	3.1%
Oklahoma	1,724,000	344,000	19.9%	71,000	4.1%
Nevada	1,479,000	250,000	16.9%	50,000	3.4%
Iowa	1,428,000	234,000	16.4%	41,000	2.8%
Kentucky	1,389,000	286,000	20.6%	57,000	4.1%
Arkansas	1,370,000	286,000	20.9%	65,000	4.8%
Mississippi	1,329,000	313,000	23.6%	72,000	5.4%
Kansas	1,277,000	219,000	17.1%	39,000	3.1%
Utah	1,259,000	173,000	13.8%	31,000	2.5%
New Mexico	970,000	183,000	18.9%	45,000	4.6%
West Virginia	885,000	212,000	23.9%	42,000	4.8%
Nebraska	853,000	136,000	16.0%	25,000	3.0%
Idaho	841,000	125,000	14.9%	23,000	2.7%

Maine	714,000	110,000	15.5%	19,000	2.6%
New Hampshire	711,000	97,000	13.6%	17,000	2.4%
Hawaii	686,000	109,000	15.9%	20,000	2.8%
Montana	530,000	68,000	12.8%	11,000	2.1%
Rhode Island	523,000	86,000	16.4%	17,000	3.2%
Delaware	495,000	94,000	19.0%	17,000	3.4%
South Dakota	401,000	64,000	15.8%	11,000	2.8%
Vermont	328,000	41,000	12.4%	7,000	2.0%
North Dakota	324,000	48,000	14.8%	8,000	2.6%
Alaska	313,000	43,000	13.8%	7,000	2.3%
Wyoming	266,000	38,000	14.3%	7,000	2.8%

Data Source: Estimated based on data from the Behavioral Risk Factor Surveillance System (BRFSS) 2021-2023. The BRFSS sampling weights were incorporated to generate generalizable estimates for each state.

[a] Diabetes status was self-reported by participants who answered "yes" to the question: “Has a doctor, nurse, or other health professional ever told you that you have diabetes?”

[b] Food security status was not directly collected in BRFSS. Instead, the data was imputed using the National Health and Nutrition Examination Survey (NHANES) data via the Predictive Means Matching (PMM) method. For each individual in BRFSS, PMM assign food security status by randomly drawing from NHANES observations that closely matched the individuals’ key demographic (age, sex, race/ethnicity, education level) and health related (BMI, self-reported diagnosis of diabetes, CHD, stroke, hypertension, and smoking status) characteristics.

[c] Low income was defined as having a family income-to-poverty ratio of less than 1.38 or indicating Medicaid as the primary source of insurance. The Department of Health and Human Services (HHS) poverty guidelines specific to each calendar year were used to determine the family income-to-poverty ratio, based on self-reported family size and income data. Income was collected in categories in the BRFSS (less than $10,000, $10,000 to <$15,000, $15,000 to <$20,000, $20,000 to <$25,000, $25,000 to <$35,000, $35,000 to <$50,000, $50,000 to <$75,000, $75,000 to <$100,000, $100,000 to <$150,000, $150,000 to <$200,000, $200,000 and above). For each individual, the median value of each income category was assigned as their income for the purpose of calculating the income-to-poverty ratio.

Table S4. Baseline Characteristics of Adults Eligible for Produce Prescription* in 50 U.S. States

State	Age, years	Female (%)	White, NH (%)	Black, NH (%)	Hispanic (%)†	Private Ins. (%)†	Medicaid (%)†	Medicare (%)†	BMI, kg/m2	CVD History (%)
Alabama	58.7 (0.7)	52.5 (3.2)	54.1 (3.1)	38.3 (3.0)	2.2 (1.1)	29.9 (2.9)	16.9 (2.5)	39.4 (3.0)	23.6 (2.8)	29.0 (2.9)
Alaska	58.5 (1.0)	56.7 (4.5)	51.4 (4.6)	4.7 (1.8)	5.5 (2.3)	29.1 (4.1)	25.5 (4.0)	22.3 (3.6)	35.7 (4.4)	26.5 (3.7)
Arizona	59.3 (0.5)	54.1 (3.1)	31.5 (2.6)	4.7 (1.2)	51.3 (3.1)	27.7 (3.1)	21.0 (2.3)	27.8 (2.5)	24.0 (2.7)	24.2 (2.5)
Arkansas	59.4 (0.7)	48.3 (3.0)	59.9 (3.0)	21.0 (2.4)	9.0 (2.0)	20.0 (2.3)	24.8 (2.7)	39.8 (2.9)	34.6 (3.0)	25.8 (2.5)
California	59.2 (0.6)	52.4 (2.8)	19.3 (1.9)	6.9 (1.4)	60.0 (2.7)	30.9 (2.8)	32.0 (2.5)	27.3 (2.4)	15.1 (1.9)	25.1 (2.5)
Colorado	57.7 (0.6)	47.5 (3.2)	41.3 (3.1)	6.0 (1.4)	44.7 (3.2)	35.9 (3.1)	23.6 (2.7)	20.0 (2.3)	24.0 (2.8)	29.2 (2.9)
Connecticut	60.2 (0.8)	48.1 (4.0)	42.3 (3.8)	18.4 (3.4)	27.8 (3.2)	33.5 (3.7)	21.6 (3.0)	30.4 (4.0)	25.2 (3.2)	26.5 (3.6)
Delaware	59.1 (1.0)	54.3 (4.5)	42.1 (4.1)	37.9 (4.8)	15.5 (3.2)	28.9 (4.0)	21.5 (4.1)	42.4 (4.4)	32.1 (4.4)	27.5 (3.6)
Florida	62.5 (0.9)	48.2 (5.0)	42.6 (4.6)	22.3 (4.5)	31.4 (5.3)	27.1 (4.5)	28.7 (5.2)	26.1 (3.5)	19.5 (3.5)	31.8 (4.6)
Georgia	58.7 (0.6)	55.6 (2.9)	39.4 (2.7)	42.3 (3.0)	11.1 (2.1)	33.5 (2.9)	14.5 (2.0)	33.0 (2.6)	21.4 (2.4)	19.3 (2.0)
Hawaii	58.4 (0.8)	49.3 (3.8)	12.5 (2.2)	1.2 (0.7)	14.6 (2.8)	43.8 (3.7)	22.4 (3.6)	25.7 (3.0)	24.7 (3.6)	28.8 (3.3)
Idaho	58.9 (0.7)	52.5 (3.5)	72.4 (3.4)	0.4 (0.3)	18.3 (3.0)	26.5 (3.1)	20.3 (3.1)	38.6 (3.4)	22.7 (3.0)	32.0 (3.4)
Illinois	59.7 (0.8)	48.6 (4.4)	43.6 (4.3)	26.8 (4.1)	27.4 (3.8)	29.3 (3.8)	20.4 (3.5)	37.3 (4.3)	17.9 (3.0)	31.9 (4.2)
Indiana	59.4 (0.4)	51.5 (2.2)	70.1 (2.1)	14.1 (1.6)	10.0 (1.4)	29.7 (2.0)	18.4 (1.7)	36.2 (2.1)	29.5 (1.9)	28.7 (2.0)
Iowa	59.8 (0.6)	50.8 (2.9)	73.0 (2.8)	9.4 (2.2)	9.7 (1.5)	37.8 (2.8)	18.5 (2.3)	34.5 (2.7)	30.0 (2.7)	26.3 (2.5)
Kansas	59.3 (0.5)	45.3 (2.5)	67.7 (2.7)	8.9 (1.5)	18.8 (2.7)	42.2 (2.6)	8.2 (1.4)	34.8 (2.3)	30.3 (2.4)	26.6 (2.2)
Kentucky	58.3 (0.9)	55.0 (4.8)	85.9 (4.2)	7.6 (2.8)	5.4 (3.4)	35.9 (4.7)	22.1 (3.9)	29.8 (4.1)	31.9 (4.6)	29.0 (4.3)
Louisiana	60.2 (0.5)	57.5 (2.7)	43.0 (2.7)	46.9 (2.8)	3.8 (1.0)	26.6 (2.4)	26.2 (2.6)	36.4 (2.6)	29.3 (2.4)	25.5 (2.6)
Maine	61.1 (0.6)	48.0 (2.9)	91.8 (1.5)	1.3 (0.7)	2.3 (1.0)	23.2 (2.4)	19.5 (2.3)	47.9 (2.9)	30.8 (2.8)	32.2 (2.6)
Maryland	59.8 (0.5)	48.5 (2.5)	33.5 (2.2)	45.2 (2.5)	15.1 (2.1)	41.0 (2.5)	14.8 (1.9)	29.0 (2.2)	26.2 (2.4)	26.2 (2.2)
Massachusetts	60.0 (0.7)	51.4 (3.9)	53.5 (4.0)	9.7 (2.0)	24.0 (3.1)	37.9 (3.9)	28.9 (3.5)	30.7 (3.5)	17.8 (2.6)	32.0 (3.9)
Michigan	59.0 (0.6)	53.4 (2.9)	65.3 (2.8)	24.0 (2.5)	5.1 (1.3)	31.2 (2.7)	25.9 (2.6)	33.7 (2.6)	26.6 (2.4)	34.8 (2.8)
Minnesota	60.0 (0.7)	49.7 (2.8)	69.7 (2.5)	9.6 (1.7)	11.5 (1.6)	34.8 (2.9)	19.0 (2.0)	33.5 (2.5)	28.8 (2.5)	25.9 (2.2)
Mississippi	58.2 (0.7)	48.2 (3.4)	47.4 (3.4)	44.2 (3.3)	0.7 (0.5)	28.0 (3.3)	17.0 (2.2)	43.5 (3.3)	26.0 (2.9)	21.0 (2.5)
Missouri	59.8 (0.6)	52.6 (3.0)	69.1 (3.0)	20.8 (2.8)	5.4 (1.7)	26.3 (2.6)	20.0 (2.6)	40.1 (2.8)	28.4 (2.6)	31.2 (2.7)
Montana	60.7 (0.8)	49.4 (3.6)	79.8 (2.9)	0.4 (0.4)	8.5 (2.6)	34.2 (3.6)	18.0 (2.7)	36.0 (3.3)	21.3 (2.8)	35.0 (3.5)
Nebraska	59.5 (0.5)	50.4 (2.8)	69.1 (2.8)	7.2 (2.1)	15.7 (2.0)	39.7 (2.8)	12.5 (1.8)	29.9 (2.4)	27.6 (2.5)	31.0 (2.6)

Nevada	59.1 (1.3)	59.1 (5.7)	37.0 (5.3)	6.9 (2.7)	42.6 (6.1)	27.3 (5.0)	18.6 (4.8)	28.4 (5.1)	29.5 (5.4)	28.3 (5.7)
New Hampshire	61.1 (0.7)	36.1 (3.5)	89.2 (3.2)	4.5 (2.9)	2.1 (0.8)	39.7 (4.0)	13.1 (2.4)	33.2 (3.5)	22.4 (3.2)	37.8 (3.8)
New Jersey	59.1 (0.7)	50.7 (3.5)	26.5 (2.6)	21.3 (2.7)	41.8 (3.5)	38.8 (3.5)	20.8 (2.6)	26.7 (3.4)	22.7 (3.1)	23.1 (2.5)
New Mexico	60.1 (0.8)	55.3 (3.9)	19.0 (2.7)	1.5 (0.7)	68.9 (3.4)	27.6 (3.5)	18.5 (2.5)	38.1 (3.8)	17.1 (2.9)	27.4 (3.5)
New York	59.7 (0.4)	51.1 (2.1)	34.7 (1.9)	16.7 (1.4)	34.1 (2.0)	25.6 (1.8)	32.1 (2.0)	29.9 (2.0)	22.6 (1.8)	24.3 (1.7)
North Carolina	59.1 (0.8)	50.9 (4.0)	51.0 (4.0)	35.5 (3.8)	10.3 (2.5)	37.4 (3.9)	11.5 (2.6)	30.8 (3.7)	21.7 (3.3)	26.5 (3.4)
North Dakota	58.9 (0.9)	42.4 (3.8)	83.6 (3.2)	2.0 (1.0)	6.7 (2.7)	40.0 (3.8)	14.4 (3.0)	36.0 (3.6)	28.6 (3.5)	33.0 (3.7)
Ohio	59.8 (0.5)	50.4 (2.2)	73.2 (2.1)	17.9 (2.0)	5.4 (1.0)	31.5 (2.1)	19.8 (1.8)	37.5 (2.1)	31.2 (2.1)	25.6 (1.8)
Oklahoma	57.4 (0.6)	50.6 (3.0)	53.0 (3.0)	11.5 (2.1)	16.6 (2.4)	29.4 (2.8)	16.5 (2.1)	31.3 (2.7)	24.8 (2.5)	29.4 (2.7)
Oregon	57.7 (0.9)	48.8 (3.8)	56.1 (3.9)	1.8 (0.9)	32.1 (3.8)	31.3 (3.5)	30.7 (3.8)	29.4 (3.4)	24.3 (3.2)	29.6 (3.5)
Pennsylvania	60.0 (0.9)	51.9 (4.3)	59.5 (4.2)	19.4 (3.2)	19.1 (3.6)	34.2 (4.1)	19.2 (3.3)	37.1 (4.2)	33.6 (4.1)	24.9 (3.6)
Rhode Island	59.2 (0.7)	47.5 (3.3)	57.0 (3.3)	7.2 (1.7)	28.6 (2.9)	31.4 (3.1)	26.7 (2.9)	25.5 (2.7)	26.2 (3.0)	24.0 (2.7)
South Carolina	60.2 (0.5)	50.7 (2.5)	49.6 (2.5)	38.1 (2.4)	4.2 (0.9)	28.2 (2.2)	13.9 (1.6)	36.6 (2.3)	30.8 (2.4)	24.7 (2.1)
South Dakota	59.0 (1.0)	38.7 (7.0)	71.8 (6.9)	1.6 (1.5)	10.0 (6.5)	42.4 (7.6)	7.7 (2.9)	37.1 (7.3)	31.5 (7.7)	27.6 (5.5)
Tennessee	60.0 (0.7)	52.4 (3.3)	70.0 (3.2)	19.9 (2.7)	3.5 (1.5)	29.6 (2.9)	17.6 (2.6)	36.1 (3.2)	34.3 (3.2)	22.9 (2.6)
Texas	58.1 (0.7)	47.4 (3.0)	23.2 (2.2)	14.4 (2.1)	58.7 (2.9)	31.8 (3.0)	15.2 (2.1)	28.0 (2.5)	20.3 (2.4)	21.3 (2.2)
Utah	58.0 (0.6)	53.4 (3.2)	57.4 (3.3)	5.5 (2.0)	31.4 (3.1)	38.7 (3.1)	13.8 (2.3)	27.8 (2.7)	15.3 (2.5)	25.7 (2.9)
Vermont	59.2 (0.9)	48.5 (3.9)	83.9 (3.8)	3.5 (1.6)	4.6 (2.9)	29.9 (3.3)	20.3 (3.3)	37.9 (3.6)	28.8 (3.6)	36.4 (3.8)
Virginia	60.5 (0.6)	45.9 (2.8)	49.6 (2.9)	32.8 (2.7)	8.3 (1.7)	29.5 (2.6)	19.9 (2.4)	35.8 (2.7)	29.2 (2.7)	27.8 (2.5)
Washington	58.4 (0.5)	48.8 (2.3)	52.9 (2.3)	8.0 (1.8)	25.4 (2.0)	35.4 (2.2)	18.0 (1.8)	28.1 (2.0)	22.6 (1.8)	30.4 (2.0)
West Virginia	60.2 (0.6)	51.7 (2.8)	88.9 (1.9)	4.6 (1.3)	1.0 (0.6)	26.8 (2.5)	20.2 (2.3)	40.3 (2.7)	32.6 (2.6)	27.8 (2.4)
Wisconsin	59.2 (0.6)	54.1 (3.0)	69.7 (3.0)	9.9 (2.2)	14.3 (2.3)	37.1 (3.0)	17.1 (2.4)	33.9 (2.7)	26.3 (2.7)	34.1 (2.9)
Wyoming	60.6 (0.8)	49.6 (4.1)	72.7 (4.0)	1.2 (1.0)	13.5 (3.1)	27.3 (3.6)	13.2 (2.9)	36.6 (3.9)	28.9 (3.8)	30.5 (3.7)

Abbreviations: BMI, body mass index; CVD, cardiovascular disease.

Note: Estimates are based on data from the Behavioral Risk Factor Surveillance System (BRFSS), 2021–2023. BRFSS sampling weights were applied to produce representative state-level estimates. All values are derived from self-reported questionnaire data.

[*]Adults with diabetes and food insecurity are eligible for produce prescription

[†] Estimated based self-reported primary source of insurance type.

Table S5. Estimated 10-Year Health and Economic Impact of Produce Prescriptions for Diabetes, by State

States	Estimates (95% Uncertainty Interval) *						ICER, Healthcare Perspective ($/QALY) #	ICER, Societal Perspective ($/QALY) #
	CVD Events Averted	QALYs	Healthcare Costs Averted, ($M)	Intervention Cost, ($M) †,	Net Cost Change, Healthcare Perspective ($M) ††	Net Cost Change, Societal Perspective ($M) §		
Alabama	1910 (971 to 3010)	1710 (682 to 2680)	457 (206 to 784)	432 (316 to 554)	-24.7 (-336 to 244)	-47.1 (-368 to 228)	Cost-saving	Cost-saving
Alaska	94.4 (47.8 to 147)	92.2 (30.8 to 159)	25.3 (11 to 44.1)	30.3 (22.1 to 38.8)	4.94 (-14.4 to 21.9)	3.67 (-16.2 to 20.4)	53600	39800
Arizona	1750 (902 to 2750)	1850 (957 to 2890)	498 (202 to 853)	475 (348 to 609)	-23.4 (-378 to 283)	-51.6 (-419 to 262)	Cost-saving	Cost-saving
Arkansas	1080 (534 to 1730)	919 (434 to 1470)	240 (103 to 401)	219 (160 to 281)	-20.8 (-191 to 121)	-32.9 (-201 to 106)	Cost-saving	Cost-saving
California	9120 (4630 to 14400)	9990 (4810 to 15500)	2590 (1120 to 4380)	2740 (2010 to 3520)	155 (-1790 to 1830)	-8.32 (-1960 to 1630)	15500	Cost-saving
Colorado	772 (391 to 1230)	814 (340 to 1320)	214 (91.5 to 373)	207 (151 to 265)	-6.72 (-169 to 126)	-21.4 (-187 to 116)	Cost-saving	Cost-saving
Connecticut	814 (416 to 1280)	815 (330 to 1350)	265 (116 to 441)	209 (153 to 269)	-56 (-237 to 103)	-68.6 (-253 to 87.5)	Cost-saving	Cost-saving
Delaware	298 (145 to 461)	294 (102 to 502)	72 (31.8 to 122)	70.9 (51.8 to 90.9)	-1.17 (-51.6 to 41.3)	-4.9 (-57.7 to 37.6)	Cost-saving	Cost-saving
Florida	7160 (3510 to 11200)	6530 (1630 to 11800)	1550 (681 to 2650)	1570 (1150 to 2020)	25.5 (-1070 to 960)	-44.9 (-1190 to 878)	3900	Cost-saving
Georgia	2930 (1480 to 4620)	2690 (1230 to 4200)	724 (325 to 1190)	687 (502 to 882)	-36.2 (-519 to 385)	-71.8 (-582 to 352)	Cost-saving	Cost-saving
Hawaii	288 (146 to 456)	285 (112 to 472)	76.5 (32.6 to 130)	95.4 (69.9 to 122)	18.9 (-38.8 to 69.7)	15.3 (-43 to 65.5)	66500	53600
Idaho	265 (134 to 414)	276 (113 to 447)	78.7 (34.3 to 138)	77.5 (56.8 to 99.4)	-1.12 (-60.8 to 49)	-4.28 (-64.3 to 47)	Cost-saving	Cost-saving
Illinois	2910 (1450 to 4640)	2880 (1110 to 4770)	835 (354 to 1430)	709 (518 to 909)	-126 (-725 to 389)	-171 (-806 to 365)	Cost-saving	Cost-saving
Indiana	1870 (957 to 2950)	1770 (910 to 2630)	515 (224 to 866)	420 (308 to 539)	-95.2 (-466 to 203)	-118 (-479 to 188)	Cost-saving	Cost-saving
Iowa	615 (306 to 973)	600 (299 to 943)	175 (76.9 to 304)	147 (107 to 188)	-28.2 (-157 to 80.1)	-36.5 (-171 to 66.6)	Cost-saving	Cost-saving
Kansas	600 (300 to 953)	575 (253 to 883)	166 (73.5 to 288)	137 (100 to 176)	-28.6 (-154 to 70.5)	-36.4 (-163 to 64.2)	Cost-saving	Cost-saving
Kentucky	900 (430 to 1470)	785 (179 to 1480)	218 (94.8 to 366)	212 (155 to 272)	-6.08 (-159 to 126)	-15.5 (-166 to 120)	Cost-saving	Cost-saving
Louisiana	1590 (809 to 2530)	1510 (755 to 2340)	391 (166 to 652)	361 (264 to 463)	-29.7 (-299 to 210)	-49.4 (-323 to 191)	Cost-saving	Cost-saving
Maine	318 (156 to 508)	262 (111 to 420)	90.6 (40.7 to 153)	69.1 (50.6 to 88.6)	-21.4 (-83.2 to 28.9)	-24.2 (-86.9 to 27.4)	Cost-saving	Cost-saving

Maryland	1430 (722 to 2230)	1450 (724 to 2290)	355 (163 to 588)	372 (272 to 478)	17.4 (-229 to 224)	-3.51 (-257 to 209)	12000	Cost-saving
Massachusetts	1260 (632 to 1980)	1230 (514 to 2060)	418 (178 to 735)	338 (248 to 432)	-79.9 (-411 to 164)	-96.8 (-425 to 153)	Cost-saving	Cost-saving
Michigan	2250 (1150 to 3560)	2160 (1110 to 3380)	626 (274 to 1070)	536 (393 to 687)	-90.6 (-556 to 275)	-122 (-591 to 242)	Cost-saving	Cost-saving
Minnesota	1010 (513 to 1600)	907 (407 to 1430)	270 (118 to 459)	239 (175 to 306)	-31.1 (-213 to 132)	-41.9 (-229 to 125)	Cost-saving	Cost-saving
Mississippi	1220 (599 to 1900)	1070 (461 to 1770)	279 (130 to 456)	256 (188 to 328)	-22.5 (-208 to 155)	-35.8 (-222 to 134)	Cost-saving	Cost-saving
Missouri	1610 (826 to 2520)	1480 (687 to 2300)	425 (187 to 723)	324 (237 to 415)	-101 (-404 to 150)	-121 (-427 to 134)	Cost-saving	Cost-saving
Montana	174 (87.6 to 274)	165 (71.4 to 269)	45 (20.4 to 75.4)	42.8 (31.3 to 54.9)	-2.21 (-33.9 to 24.8)	-4.5 (-37.8 to 22.9)	Cost-saving	Cost-saving
Nebraska	372 (190 to 589)	354 (159 to 556)	103 (44.2 to 172)	89.9 (65.7 to 115)	-13.4 (-87.4 to 47.8)	-18.1 (-93.5 to 43.8)	Cost-saving	Cost-saving
Nevada	748 (364 to 1190)	749 (186 to 1420)	188 (77.3 to 317)	185 (135 to 237)	-3.21 (-147 to 112)	-15.1 (-164 to 105)	Cost-saving	Cost-saving
New Hampshire	249 (124 to 390)	235 (97.1 to 395)	70 (29.4 to 120)	53.8 (39.4 to 69.1)	-16.2 (-68 to 27.1)	-19.5 (-73.2 to 23.4)	Cost-saving	Cost-saving
New Jersey	2290 (1140 to 3620)	2220 (814 to 3720)	699 (294 to 1170)	569 (415 to 728)	-131 (-655 to 290)	-168 (-661 to 262)	Cost-saving	Cost-saving
New Mexico	591 (301 to 926)	640 (292 to 1050)	169 (74.3 to 286)	156 (114 to 199)	-13.1 (-132 to 91.1)	-22.7 (-146 to 84)	Cost-saving	Cost-saving
New York	4940 (2440 to 7830)	5130 (2670 to 7540)	1590 (637 to 2690)	1290 (942 to 1650)	-297 (-1490 to 669)	-377 (-1580 to 610)	Cost-saving	Cost-saving
North Carolina	2630 (1310 to 4230)	2230 (568 to 4110)	607 (273 to 1030)	581 (425 to 744)	-26.5 (-469 to 338)	-51.8 (-484 to 316)	Cost-saving	Cost-saving
North Dakota	114 (54.2 to 182)	108 (42.3 to 184)	31.5 (12.9 to 54.6)	26.2 (19.2 to 33.6)	-5.32 (-30.5 to 13.5)	-6.87 (-32 to 12.3)	Cost-saving	Cost-saving
Ohio	3090 (1580 to 4960)	2830 (1420 to 4350)	828 (356 to 1440)	709 (519 to 908)	-119 (-751 to 378)	-155 (-789 to 354)	Cost-saving	Cost-saving
Oklahoma	1020 (515 to 1610)	978 (403 to 1580)	263 (114 to 446)	248 (181 to 318)	-14.4 (-197 to 147)	-27.4 (-216 to 133)	Cost-saving	Cost-saving
Oregon	812 (399 to 1290)	842 (340 to 1370)	244 (104 to 421)	247 (180 to 316)	2.95 (-180 to 150)	-7.86 (-193 to 138)	3500	Cost-saving
Pennsylvania	3070 (1540 to 4830)	3140 (1150 to 5290)	1000 (431 to 1680)	767 (561 to 984)	-236 (-964 to 328)	-284 (-1010 to 296)	Cost-saving	Cost-saving
Rhode Island	272 (138 to 427)	255 (100 to 405)	81.3 (35.3 to 137)	64.3 (47 to 82.5)	-17 (-75.5 to 32.7)	-21.3 (-77.9 to 28.6)	Cost-saving	Cost-saving
South Carolina	1660 (837 to 2660)	1550 (785 to 2350)	388 (176 to 653)	373 (273 to 478)	-15.4 (-288 to 213)	-33.9 (-304 to 200)	Cost-saving	Cost-saving
South Dakota	183 (91 to 291)	194 (18 to 394)	56.3 (23.7 to 94.1)	51.2 (37.5 to 65.6)	-5.08 (-45 to 30)	-8.04 (-48.1 to 27.2)	Cost-saving	Cost-saving

Tennessee	2630 (1310 to 4140)	2220 (764 to 3800)	607 (277 to 1010)	562 (412 to 721)	-44.3 (-466 to 314)	-73.8 (-517 to 298)	Cost-saving	Cost-saving
Texas	9240 (4710 to 14500)	8720 (4070 to 13500)	2370 (1030 to 3900)	2240 (1640 to 2870)	-133 (-1730 to 1320)	-254 (-1860 to 1210)	Cost-saving	Cost-saving
Utah	420 (209 to 666)	438 (191 to 694)	123 (51.3 to 217)	114 (83.1 to 146)	-8.88 (-104 to 66)	-15.1 (-112 to 62.5)	Cost-saving	Cost-saving
Vermont	95.5 (48.1 to 150)	93.8 (39 to 157)	30.8 (13.1 to 54)	25.2 (18.5 to 32.3)	-5.62 (-29.4 to 12.9)	-7.08 (-30.2 to 12.1)	Cost-saving	Cost-saving
Virginia	2440 (1200 to 3870)	2190 (962 to 3490)	567 (260 to 962)	541 (396 to 694)	-25.8 (-437 to 303)	-57.7 (-480 to 261)	Cost-saving	Cost-saving
Washington	1260 (619 to 1960)	1230 (579 to 1860)	343 (152 to 590)	343 (251 to 440)	0.235 (-243 to 206)	-16.5 (-260 to 192)	190	Cost-saving
West Virginia	671 (337 to 1060)	549 (241 to 885)	153 (68.7 to 258)	146 (107 to 187)	-7.18 (-125 to 82.2)	-13.4 (-131 to 77.4)	Cost-saving	Cost-saving
Wisconsin	1100 (553 to 1750)	1130 (519 to 1740)	333 (144 to 564)	287 (210 to 368)	-46.3 (-301 to 153)	-61.7 (-306 to 142)	Cost-saving	Cost-saving
Wyoming	105 (53.2 to 165)	99.8 (34.1 to 166)	27.3 (11.8 to 46.5)	25.4 (18.5 to 32.5)	-1.92 (-21.9 to 14.4)	-3.17 (-22.6 to 13.2)	Cost-saving	Cost-saving

Abbreviations: CVD, cardiovascular disease; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-years; and UI, uncertainty interval.

Notes: All monetary values are in 2023 US dollars. All costs and QALYs and were discounted by 3% annually.

[*] Estimates represent the mean differences in projected health and economic outcomes for a national PRx program compared to the usual scenario of current healthcare from 1,000 Monte-Carlo simulations, with 95% uncertainty intervals derived from the 2.5th and 97.5th values.

[†] Intervention costs include food costs and administrative costs.

[††] Net costs in a healthcare perspective was calculated as intervention cost minus healthcare cost averted, compared to usual care. Negative value represents cost saving. Negative value represents cost saving.

[§] Net costs in a societal perspective was calculated as intervention cost minus healthcare cost averted and productivity loss averted, compared to usual care. Negative value represents cost saving. Negative value represents cost saving.

[#] ICER is calculated as $Cost/QALYs gained. Cost-saving is defined as Net costs < $0 with QALY gain

Table S6. Estimated 10-Year Health and Economic Impact of Produce Prescriptions for Diabetes Per 10,000 Patients Treated, by State

STATES		ESTIMATES (95% UNCERTAINTY INTERVAL) *					ICER ($/QALY) §
		No. of CVD Events Averted	QALYs	Healthcare Averted, ($M)	Intervention Cost, ($M) †,	Net Cost Change, Healthcare Perspective ($M) ††	
ALABAMA	All	164 (83.3 to 258)	147 (58.5 to 230)	39.2 (17.7 to 67.2)	37.1 (27.1 to 47.5)	-2.12 (-28.8 to 20.9)	Cost-saving
	Medicaid	166 (76.4 to 276)	133 (-38.3 to 312)	40.8 (17.2 to 72.7)	38.6 (28.2 to 49.4)	-2.28 (-34.1 to 22.7)	Cost-saving
	Medicare	158 (78.8 to 251)	144 (45 to 248)	38.3 (16 to 65.8)	34.2 (25 to 43.8)	-4.05 (-30.8 to 19.5)	Cost-saving
	Private	137 (66.9 to 220)	143 (29.3 to 268)	38.3 (16.7 to 66)	39.4 (28.8 to 50.5)	1.09 (-26.5 to 25)	7610
ALASKA	All	154 (78.1 to 240)	151 (50.4 to 260)	41.4 (18 to 72.2)	49.5 (36.2 to 63.5)	8.09 (-23.6 to 35.8)	53600
	Medicaid	162 (78.3 to 261)	152 (-27.6 to 334)	42.9 (17.2 to 76.4)	50.9 (37.4 to 65.5)	7.99 (-25.4 to 38.6)	52400
	Medicare	169 (79.5 to 280)	166 (-3.28 to 350)	41.1 (16.7 to 72)	45.6 (33.4 to 58.5)	4.46 (-27.4 to 32.4)	26800
	Private	162 (74.2 to 264)	150 (-28.8 to 332)	41.5 (17.5 to 72.5)	51.6 (37.9 to 66.2)	10.2 (-22.3 to 38)	67900
ARIZONA	All	146 (75.1 to 229)	154 (79.7 to 240)	41.5 (16.8 to 71.1)	39.6 (29 to 50.7)	-1.95 (-31.5 to 23.6)	Cost-saving
	Medicaid	156 (77.4 to 252)	156 (39.7 to 297)	43 (17.4 to 76.2)	40.5 (29.6 to 51.9)	-2.52 (-37.3 to 24.4)	Cost-saving
	Medicare	171 (89.9 to 273)	166 (55.9 to 296)	41.3 (16.5 to 73.7)	36.2 (26.7 to 46.4)	-5.1 (-38.9 to 20.7)	Cost-saving
	Private	123 (55.9 to 196)	146 (23 to 276)	40.9 (17.1 to 71.2)	41.6 (30.4 to 53.3)	0.689 (-29.6 to 27.5)	4730
ARKANSAS	All	176 (87.3 to 283)	150 (70.9 to 241)	39.2 (16.8 to 65.6)	35.8 (26.2 to 46)	-3.4 (-31.1 to 19.7)	Cost-saving
	Medicaid	186 (83 to 300)	154 (-1.81 to 320)	40.5 (16.1 to 70)	37.3 (27.4 to 47.9)	-3.12 (-33.6 to 22.3)	Cost-saving
	Medicare	187 (93.8 to 292)	150 (48.8 to 264)	39.3 (16.5 to 67.5)	33.8 (24.8 to 43.4)	-5.55 (-34.6 to 17.1)	Cost-saving
	Private	160 (76.2 to 258)	154 (29.9 to 283)	37.9 (16.7 to 62.9)	37.4 (27.4 to 48.1)	-0.512 (-28.6 to 22.1)	Cost-saving
CALIFORNIA	All	146 (74.1 to 231)	160 (77.1 to 249)	41.5 (17.9 to 70.2)	43.9 (32.2 to 56.3)	2.48 (-28.7 to 29.4)	15500
	Medicaid	136 (66.8 to 217)	156 (61.2 to 265)	42 (18.5 to 75.4)	45 (32.9 to 57.8)	3.03 (-31.6 to 30.2)	19500
	Medicare	159 (77.2 to 256)	165 (47.4 to 296)	41.9 (18 to 73.8)	41.3 (30.2 to 52.9)	-0.651 (-34.4 to 25.2)	Cost-saving
	Private	153 (68.7 to 242)	160 (31.9 to 301)	40.2 (16.4 to 70.8)	44.6 (32.6 to 57.1)	4.36 (-27.1 to 30.4)	27300
COLORADO	All	149 (75.3 to 237)	157 (65.4 to 254)	41.2 (17.6 to 71.8)	39.9 (29.1 to 51.1)	-1.29 (-32.6 to 24.3)	Cost-saving
	Medicaid	180 (87.8 to 293)	155 (-1.14 to 312)	42.8 (17.1 to 79.8)	40.3 (29.5 to 51.6)	-2.51 (-40.4 to 25)	Cost-saving
	Medicare	164 (77.2 to 263)	157 (-2.07 to 312)	41.4 (17.1 to 72.4)	36.4 (26.6 to 46.5)	-5.04 (-38.7 to 21)	Cost-saving
	Private	129 (64.4 to 211)	155 (44.8 to 282)	40 (16.7 to 70.5)	41 (30 to 52.6)	1.04 (-31.6 to 28.1)	6710
CONNECTICUT	All	155 (79.2 to 243)	155 (62.9 to 257)	50.5 (22.1 to 84)	39.9 (29.2 to 51.2)	-10.7 (-45 to 19.7)	Cost-saving

	Medicaid	148 (68.2 to 240)	139 (8.54 to 278)	51 (21 to 90.1)	40.6 (29.7 to 52.1)	-10.4 (-51.5 to 21)	Cost-saving
	Medicare	150 (71.5 to 241)	140 (-13.4 to 297)	51.5 (20.8 to 89.1)	37.6 (27.5 to 48.3)	-13.9 (-51.3 to 17.6)	Cost-saving
	Private	162 (78.4 to 260)	173 (43.8 to 323)	51.4 (21.5 to 85.3)	41.7 (30.6 to 53.5)	-9.66 (-44.3 to 21.3)	Cost-saving
DELAWARE	All	165 (80.3 to 256)	163 (56.3 to 278)	40 (17.6 to 67.4)	39.3 (28.8 to 50.4)	-0.649 (-28.6 to 22.9)	Cost-saving
	Medicaid	161 (68.3 to 281)	173 (-33.7 to 401)	41.4 (17 to 73.8)	41.7 (30.6 to 53.3)	0.278 (-34 to 26.2)	1610
	Medicare	185 (86.5 to 296)	161 (-2.17 to 335)	40.3 (16.5 to 68.8)	36.9 (27 to 47.2)	-3.41 (-32.3 to 21)	Cost-saving
	Private	141 (65.8 to 232)	158 (20.8 to 313)	38.7 (16.8 to 68.4)	40.8 (30 to 52.3)	2.09 (-27 to 24.6)	13300
FLORIDA	All	181 (88.7 to 285)	165 (41.3 to 298)	39.1 (17.2 to 67)	39.7 (29 to 51)	0.645 (-27 to 24.3)	3900
	Medicaid	190 (67.3 to 320)	195 (-99.3 to 491)	38.5 (14.1 to 70.1)	39.6 (28.9 to 50.8)	1.08 (-32.2 to 27.2)	5550
	Medicare	160 (77.8 to 257)	147 (32.5 to 282)	39.3 (15.6 to 69)	37.7 (27.6 to 48.2)	-1.59 (-30.7 to 22.8)	Cost-saving
	Private	169 (75.4 to 277)	149 (-66.9 to 362)	39.4 (16.4 to 67.3)	42.4 (31.1 to 54.3)	2.99 (-26.7 to 27.3)	20100
GEORGIA	All	160 (80.9 to 253)	147 (67.2 to 230)	39.6 (17.8 to 65.3)	37.6 (27.5 to 48.3)	-1.98 (-28.4 to 21.1)	Cost-saving
	Medicaid	161 (76.4 to 261)	145 (-3.85 to 296)	40.3 (17 to 70.4)	38.1 (27.9 to 48.8)	-2.24 (-31.9 to 22.1)	Cost-saving
	Medicare	166 (84.4 to 264)	150 (50.6 to 265)	39.2 (17 to 66.4)	34.5 (25.2 to 44.2)	-4.69 (-31.5 to 18.4)	Cost-saving
	Private	144 (70.8 to 230)	149 (36.9 to 265)	39.3 (16.8 to 67.1)	39.8 (29.1 to 51.1)	0.577 (-28.3 to 23.9)	3880
HAWAII	All	156 (78.8 to 246)	154 (60.4 to 255)	41.2 (17.6 to 70.3)	51.5 (37.7 to 65.9)	10.2 (-20.9 to 37.6)	66500
	Medicaid	196 (88.1 to 326)	150 (-88.3 to 399)	43.7 (16.7 to 77.9)	52.9 (38.7 to 67.8)	9.18 (-26.1 to 39.1)	61200
	Medicare	182 (85 to 293)	157 (20.6 to 313)	41.1 (16.1 to 72.9)	46.1 (33.8 to 59.1)	5.06 (-28.8 to 32.2)	32200
	Private	125 (61.4 to 196)	155 (49.8 to 267)	40 (17.1 to 71.5)	53.5 (39.2 to 68.6)	13.5 (-19 to 40.8)	86800
IDAHO	All	137 (69.3 to 214)	142 (58 to 230)	40.5 (17.7 to 70.9)	40 (29.3 to 51.2)	-0.579 (-31.4 to 25.3)	Cost-saving
	Medicaid	101 (40.9 to 162)	135 (0.324 to 276)	42.6 (15.8 to 81.4)	44 (32.2 to 56.4)	1.44 (-38.1 to 30.8)	10700
	Medicare	172 (83.5 to 278)	144 (3.63 to 284)	41.1 (16.6 to 73.4)	36.7 (26.9 to 47.1)	-4.32 (-38.4 to 21.7)	Cost-saving
	Private	122 (57.9 to 198)	143 (30.4 to 259)	39.6 (16.8 to 70.1)	42.3 (30.9 to 54.1)	2.73 (-30.5 to 27.8)	19100
ILLINOIS	All	155 (77.5 to 247)	154 (59.2 to 254)	44.5 (18.9 to 76.4)	37.8 (27.6 to 48.5)	-6.7 (-38.7 to 20.7)	Cost-saving
	Medicaid	168 (77.9 to 280)	149 (-28.9 to 336)	45.8 (18.8 to 79.3)	38.4 (28.1 to 49)	-7.38 (-42.6 to 20.9)	Cost-saving
	Medicare	169 (80.9 to 276)	155 (10.2 to 312)	44.7 (18 to 78.3)	35.2 (25.8 to 45.2)	-9.52 (-45 to 17.9)	Cost-saving
	Private	150 (68.3 to 244)	159 (8.81 to 328)	43.3 (17.5 to 74.6)	39.4 (28.8 to 50.4)	-3.95 (-36.7 to 23.6)	Cost-saving
INDIANA	All	159 (81.6 to 251)	150 (77.6 to 224)	43.9 (19.1 to 73.8)	35.8 (26.2 to 46)	-8.11 (-39.7 to 17.3)	Cost-saving
	Medicaid	168 (85.3 to 266)	153 (55.7 to 260)	46.4 (19.2 to 82.8)	38 (27.8 to 48.7)	-8.35 (-46.2 to 20.4)	Cost-saving
	Medicare	169 (80.1 to 270)	150 (63.2 to 238)	43.4 (18 to 74.9)	33.1 (24.3 to 42.4)	-10.3 (-41.8 to 15.8)	Cost-saving
	Private	139 (70.2 to 223)	152 (67 to 244)	43.1 (18.2 to 72.6)	38 (27.7 to 48.7)	-5.1 (-35.7 to 21.1)	Cost-saving
IOWA	All	155 (77 to 245)	151 (75.3 to 237)	44 (19.3 to 76.3)	36.9 (27 to 47.3)	-7.1 (-39.6 to 20.2)	Cost-saving

	Medicaid	163 (75.2 to 263)	151 (-0.503 to 301)	46.6 (20.2 to 83.6)	39.3 (28.8 to 50.3)	-7.3 (-45.7 to 21.5)	Cost-saving
	Medicare	172 (84.8 to 273)	151 (52.1 to 263)	43.8 (18.2 to 79.9)	33.8 (24.8 to 43.3)	-9.98 (-45.6 to 16.6)	Cost-saving
	Private	138 (65.9 to 223)	152 (52.3 to 253)	43.4 (17.7 to 76.2)	38.8 (28.4 to 49.8)	-4.51 (-39.7 to 23.5)	Cost-saving
KANSAS	All	159 (79.7 to 253)	153 (67.2 to 234)	44 (19.5 to 76.5)	36.4 (26.6 to 46.8)	-7.59 (-40.7 to 18.7)	Cost-saving
	Medicaid	191 (91 to 303)	146 (-37.2 to 342)	44.9 (19 to 77.3)	36.1 (26.5 to 46.3)	-8.77 (-43.6 to 18.7)	Cost-saving
	Medicare	172 (88.6 to 274)	146 (57.6 to 242)	43.5 (18.4 to 78.4)	33.3 (24.3 to 42.6)	-10.2 (-46.5 to 15.8)	Cost-saving
	Private	141 (68.8 to 229)	156 (43.2 to 267)	44 (19.4 to 75.3)	38.8 (28.3 to 49.7)	-5.25 (-38.3 to 21.5)	Cost-saving
KENTUCKY	All	161 (77 to 263)	141 (32.1 to 264)	39 (17 to 65.6)	37.9 (27.8 to 48.7)	-1.09 (-28.5 to 22.6)	Cost-saving
	Medicaid	143 (64.2 to 236)	138 (-31.9 to 323)	40.8 (17.6 to 72.5)	39.9 (29.3 to 51.1)	-0.913 (-33.2 to 25.1)	Cost-saving
	Medicare	167 (79.2 to 275)	134 (-15.3 to 290)	37.7 (15.8 to 63.9)	33.9 (24.8 to 43.5)	-3.78 (-32.3 to 19.7)	Cost-saving
	Private	153 (65.6 to 256)	150 (-49.2 to 358)	39.1 (16.1 to 68.1)	40.4 (29.6 to 51.9)	1.32 (-26.5 to 25.3)	8820
LOUISIANA	All	159 (81.1 to 254)	152 (75.7 to 235)	39.2 (16.7 to 65.4)	36.2 (26.5 to 46.4)	-2.98 (-30 to 21)	Cost-saving
	Medicaid	183 (89.9 to 295)	156 (16 to 298)	40.5 (16.7 to 71.1)	37.1 (27.2 to 47.4)	-3.4 (-34.5 to 22)	Cost-saving
	Medicare	172 (84.4 to 279)	150 (50.8 to 262)	39.8 (16.3 to 68.6)	34.1 (25 to 43.7)	-5.71 (-36.3 to 19.2)	Cost-saving
	Private	122 (60.4 to 199)	145 (46.4 to 255)	37.9 (15.1 to 64.6)	38.3 (28 to 49.2)	0.431 (-26.6 to 24.8)	2980
MAINE	All	175 (85.8 to 279)	144 (60.8 to 231)	49.7 (22.3 to 83.8)	38 (27.8 to 48.7)	-11.8 (-45.7 to 15.9)	Cost-saving
	Medicaid	194 (87.6 to 313)	144 (-7.92 to 314)	52.5 (22.7 to 93.1)	40.5 (29.6 to 51.9)	-12 (-52.3 to 19.2)	Cost-saving
	Medicare	167 (83 to 266)	139 (36.9 to 248)	48.8 (21.4 to 83.1)	35.4 (26 to 45.4)	-13.4 (-48.5 to 14.9)	Cost-saving
	Private	169 (79.1 to 278)	147 (7.59 to 285)	50.6 (22 to 87.9)	41 (30.1 to 52.5)	-9.63 (-47.4 to 19.8)	Cost-saving
MARYLAND	All	159 (80.4 to 249)	161 (80.6 to 254)	39.5 (18.2 to 65.4)	41.4 (30.3 to 53.1)	1.93 (-25.5 to 24.9)	12000
	Medicaid	166 (79.7 to 271)	161 (13.7 to 313)	41.8 (18.4 to 71.9)	43.1 (31.6 to 55.3)	1.31 (-30.7 to 26.5)	8110
	Medicare	174 (84.9 to 276)	166 (66.2 to 285)	38.5 (17 to 64.2)	37.2 (27.3 to 47.8)	-1.29 (-29.6 to 22.6)	Cost-saving
	Private	147 (75 to 233)	161 (65.5 to 264)	39.5 (17.9 to 66.4)	43.5 (31.9 to 55.8)	4.03 (-25.1 to 28.3)	24900
MASSACHUSETTS	All	152 (76.5 to 239)	148 (62.2 to 249)	50.6 (21.6 to 89)	40.9 (30 to 52.3)	-9.68 (-49.8 to 19.8)	Cost-saving
	Medicaid	182 (81.1 to 304)	163 (22 to 323)	52.9 (23.4 to 94.1)	42.5 (31.1 to 54.4)	-10.3 (-53.1 to 22)	Cost-saving
	Medicare	168 (82 to 276)	141 (-9.26 to 296)	49.9 (20.9 to 91.9)	36.9 (27.1 to 47.2)	-13 (-57.2 to 16.3)	Cost-saving
	Private	119 (58.2 to 191)	144 (24.6 to 271)	49.6 (20.5 to 86.4)	42.9 (31.5 to 54.9)	-6.7 (-46.9 to 23.9)	Cost-saving
MICHIGAN	All	157 (80.1 to 249)	151 (77.7 to 236)	43.8 (19.1 to 74.7)	37.5 (27.5 to 48)	-6.33 (-38.9 to 19.2)	Cost-saving
	Medicaid	173 (85.4 to 276)	145 (19.6 to 280)	45.2 (18.9 to 81.5)	38.5 (28.3 to 49.4)	-6.7 (-45.5 to 21.5)	Cost-saving
	Medicare	170 (83.4 to 273)	153 (52.7 to 263)	43.8 (18.5 to 76.7)	34.9 (25.5 to 44.8)	-8.89 (-43.4 to 17.1)	Cost-saving
	Private	135 (65.3 to 216)	154 (49.9 to 271)	42.7 (19.2 to 74.9)	39.4 (28.9 to 50.5)	-3.3 (-35.9 to 22.8)	Cost-saving

MINNESOTA	All	166 (84 to 263)	149 (66.7 to 234)	44.2 (19.2 to 75.2)	39.1 (28.6 to 50.2)	-5.09 (-34.8 to 21.7)	Cost-saving
	Medicaid	155 (78.9 to 248)	155 (41.2 to 278)	47 (18.5 to 81.8)	41.9 (30.7 to 53.7)	-5.09 (-39.8 to 24.7)	Cost-saving
	Medicare	183 (94.5 to 284)	145 (50.8 to 254)	44.3 (19.1 to 78.8)	36.1 (26.5 to 46.2)	-8.19 (-42.8 to 18.6)	Cost-saving
	Private	152 (73.8 to 240)	149 (40 to 272)	42.8 (18.4 to 73)	40.7 (29.8 to 52.1)	-2.09 (-32.7 to 24.7)	Cost-saving
MISSISSIPPI	All	172 (84.6 to 268)	151 (65 to 249)	39.3 (18.3 to 64.3)	36.2 (26.5 to 46.3)	-3.18 (-29.3 to 21.9)	Cost-saving
	Medicaid	181 (76.8 to 294)	136 (-61.3 to 325)	39.5 (16.6 to 69.4)	36.3 (26.6 to 46.5)	-3.16 (-35.7 to 22.1)	Cost-saving
	Medicare	169 (84.7 to 263)	153 (41.5 to 273)	39.2 (17.5 to 66.8)	34 (24.9 to 43.6)	-5.21 (-33.5 to 19.5)	Cost-saving
	Private	160 (74 to 261)	160 (14.5 to 315)	39.2 (17.6 to 63.7)	38.8 (28.4 to 49.8)	-0.417 (-25.8 to 25)	Cost-saving
MISSOURI	All	167 (85.7 to 262)	153 (71.2 to 238)	44.1 (19.4 to 75)	33.6 (24.6 to 43.1)	-10.5 (-41.9 to 15.6)	Cost-saving
	Medicaid	189 (84.3 to 312)	149 (-23.6 to 333)	46.1 (19.2 to 81.4)	35.3 (25.8 to 45.3)	-10.8 (-46.8 to 17)	Cost-saving
	Medicare	179 (89.9 to 281)	158 (56 to 268)	43.5 (20 to 74.4)	31.1 (22.7 to 39.8)	-12.4 (-45.2 to 12.9)	Cost-saving
	Private	142 (71.5 to 231)	147 (30.2 to 266)	43.1 (17.5 to 73.6)	35.6 (26 to 45.6)	-7.51 (-38.7 to 19.3)	Cost-saving
MONTANA	All	154 (77.8 to 243)	146 (63.4 to 239)	40 (18.1 to 67)	38.1 (27.8 to 48.8)	-1.96 (-30.1 to 22)	Cost-saving
	Medicaid	145 (70 to 238)	141 (-20.7 to 298)	42.1 (17.2 to 74.6)	40.8 (29.8 to 52.2)	-1.31 (-35.2 to 25)	Cost-saving
	Medicare	174 (84.1 to 275)	150 (36.9 to 279)	39.8 (17.6 to 69.5)	35 (25.7 to 44.8)	-4.83 (-35.4 to 19.4)	Cost-saving
	Private	144 (70.3 to 235)	151 (25.6 to 310)	39.7 (16.9 to 70.7)	40.3 (29.4 to 51.7)	0.594 (-29.7 to 24.4)	3920
NEBRASKA	All	159 (81.2 to 251)	151 (68 to 237)	44.1 (18.9 to 73.5)	38.4 (28.1 to 49.2)	-5.72 (-37.3 to 20.4)	Cost-saving
	Medicaid	159 (75.5 to 260)	158 (-7.16 to 333)	45.1 (17.9 to 79.8)	40 (29.3 to 51.1)	-5.19 (-42 to 22.6)	Cost-saving
	Medicare	177 (87.9 to 281)	159 (48.7 to 279)	44.2 (18.5 to 77.1)	35.2 (25.7 to 45.1)	-9.04 (-41.9 to 18.6)	Cost-saving
	Private	146 (71.2 to 237)	146 (34 to 260)	43.5 (18.3 to 72.6)	40.4 (29.6 to 51.7)	-3.09 (-35.5 to 23.6)	Cost-saving
NEVADA	All	166 (80.6 to 265)	166 (41.3 to 315)	41.7 (17.1 to 70.2)	41 (29.9 to 52.5)	-0.711 (-32.6 to 24.9)	Cost-saving
	Medicaid	126 (52.2 to 227)	136 (-61 to 342)	42.7 (16.3 to 76.9)	43.1 (31.5 to 55.3)	0.374 (-35.2 to 29.8)	2750
	Medicare	231 (99.8 to 405)	198 (-84.5 to 500)	42.6 (16.4 to 76.4)	37.2 (27.3 to 47.5)	-5.44 (-40.9 to 21.5)	Cost-saving
	Private	136 (60.3 to 223)	148 (-28 to 335)	40.6 (16.9 to 70.4)	42.7 (31.1 to 54.7)	2.08 (-29.1 to 27.7)	14100
NEW HAMPSHIRE	All	176 (87.3 to 276)	166 (68.6 to 279)	49.5 (20.7 to 84.4)	38 (27.8 to 48.8)	-11.4 (-48 to 19.1)	Cost-saving
	Medicaid	210 (83.6 to 350)	158 (-78.3 to 425)	51.4 (20.3 to 91)	39.4 (28.9 to 50.5)	-12 (-51.3 to 20.7)	Cost-saving
	Medicare	186 (89.7 to 306)	161 (25.4 to 308)	49.4 (19.8 to 86.6)	35.1 (25.8 to 45)	-14.2 (-52.4 to 16)	Cost-saving
	Private	147 (65.3 to 235)	166 (22.7 to 322)	50.1 (20 to 87.8)	40.3 (29.5 to 51.7)	-9.78 (-49.1 to 21.7)	Cost-saving
NEW JERSEY	All	164 (82 to 259)	159 (58.3 to 267)	50.1 (21 to 83.9)	40.7 (29.7 to 52.1)	-9.37 (-46.9 to 20.8)	Cost-saving
	Medicaid	181 (83.2 to 296)	155 (-0.934 to 347)	50.3 (20 to 88.7)	40 (29.2 to 51.4)	-10.3 (-50.2 to 21.8)	Cost-saving
	Medicare	171 (84.5 to 276)	163 (8.19 to 320)	52 (21.3 to 91.1)	38.6 (28.2 to 49.5)	-13.4 (-52.7 to 19.6)	Cost-saving

	Private	157 (73.4 to 250)	163 (8.81 to 307)	49.9 (21.2 to 85.4)	42.3 (31 to 54.1)	-7.59 (-44.1 to 24)	Cost-saving
NEW MEXICO	All	140 (71.5 to 220)	152 (69.4 to 250)	40.1 (17.6 to 67.9)	37 (27.1 to 47.3)	-3.12 (-31.3 to 21.6)	Cost-saving
	Medicaid	111 (54.1 to 182)	143 (21.8 to 266)	40.6 (16.4 to 71.3)	38.9 (28.4 to 50)	-1.68 (-34.5 to 24.3)	Cost-saving
	Medicare	174 (86.7 to 278)	164 (33.6 to 328)	40.6 (16.9 to 69.6)	34.2 (25 to 43.7)	-6.42 (-37.7 to 18.5)	Cost-saving
	Private	116 (54 to 185)	139 (28 to 262)	40.1 (17.6 to 69.6)	39.7 (29.1 to 50.9)	-0.321 (-29.8 to 26.6)	Cost-saving
NEW YORK	All	155 (76.9 to 247)	161 (83.9 to 237)	49.9 (20.1 to 84.7)	40.6 (29.7 to 52)	-9.35 (-46.9 to 21.1)	Cost-saving
	Medicaid	150 (73.2 to 240)	157 (68.1 to 253)	50.9 (19.7 to 88.8)	41.9 (30.6 to 53.7)	-9.03 (-48.4 to 22.8)	Cost-saving
	Medicare	177 (86.2 to 280)	172 (65.1 to 285)	50.3 (20 to 88)	37.7 (27.6 to 48.4)	-12.6 (-50.8 to 18)	Cost-saving
	Private	145 (69.8 to 234)	158 (74.8 to 259)	50.2 (20 to 88)	42.3 (30.9 to 54.3)	-7.88 (-47.3 to 21.7)	Cost-saving
NORTH CAROLINA	All	170 (84.5 to 274)	144 (36.7 to 266)	39.3 (17.6 to 66.8)	37.6 (27.5 to 48.2)	-1.72 (-30.4 to 21.9)	Cost-saving
	Medicaid	198 (82.7 to 331)	148 (-140 to 444)	41.2 (16 to 75.2)	39.6 (29.1 to 50.8)	-1.59 (-36.4 to 25.2)	Cost-saving
	Medicare	160 (74.9 to 259)	145 (-1.47 to 290)	38.8 (16.4 to 67.9)	34.9 (25.5 to 44.7)	-3.95 (-33.4 to 20.4)	Cost-saving
	Private	175 (71 to 300)	141 (-80.6 to 367)	39.8 (16.9 to 69)	39.8 (29.1 to 50.9)	-0.00274 (-31.3 to 24.5)	Cost-saving
NORTH DAKOTA	All	158 (75.1 to 251)	150 (58.6 to 255)	43.7 (17.9 to 75.5)	36.3 (26.6 to 46.5)	-7.37 (-42.2 to 18.7)	Cost-saving
	Medicaid	146 (60.5 to 247)	151 (-41.1 to 369)	44.7 (16.9 to 84.1)	38.4 (28.2 to 49.2)	-6.28 (-47 to 22.2)	Cost-saving
	Medicare	175 (86.8 to 283)	142 (19.1 to 270)	42.6 (17 to 77.4)	32.3 (23.7 to 41.4)	-10.4 (-46.4 to 15.9)	Cost-saving
	Private	135 (60 to 218)	159 (50.7 to 286)	44.1 (17.9 to 75.9)	39.7 (29 to 50.8)	-4.42 (-38.3 to 23.2)	Cost-saving
OHIO	All	162 (82.9 to 260)	148 (74.5 to 228)	43.4 (18.7 to 75.4)	37.2 (27.2 to 47.7)	-6.23 (-39.4 to 19.8)	Cost-saving
	Medicaid	169 (82 to 269)	151 (33.4 to 288)	45.1 (18.1 to 85.7)	39.2 (28.7 to 50.2)	-5.94 (-46.7 to 22.5)	Cost-saving
	Medicare	177 (90.2 to 285)	151 (60.2 to 251)	43.5 (18.4 to 78.1)	34.6 (25.4 to 44.3)	-8.87 (-43.8 to 18.1)	Cost-saving
	Private	136 (67.4 to 217)	143 (55.3 to 240)	42.3 (17.8 to 70.8)	39.1 (28.6 to 50.2)	-3.12 (-34.7 to 23.6)	Cost-saving
OKLAHOMA	All	149 (75.6 to 236)	143 (59.1 to 232)	38.5 (16.8 to 65.5)	36.4 (26.6 to 46.7)	-2.11 (-28.9 to 21.5)	Cost-saving
	Medicaid	162 (79.2 to 260)	133 (-4.89 to 276)	41 (16.6 to 71)	38.6 (28.3 to 49.5)	-2.4 (-32.4 to 23.5)	Cost-saving
	Medicare	155 (79.9 to 249)	146 (41.9 to 261)	37.3 (16.1 to 65.3)	32.4 (23.7 to 41.6)	-4.94 (-33.3 to 17.9)	Cost-saving
	Private	149 (72.6 to 240)	146 (27.1 to 290)	38.2 (16.5 to 65)	38.2 (28 to 48.9)	-0.0442 (-28.4 to 24.7)	Cost-saving
OREGON	All	138 (68 to 221)	144 (58 to 234)	41.5 (17.8 to 71.8)	42 (30.8 to 53.9)	0.503 (-30.7 to 25.5)	3500
	Medicaid	128 (58.8 to 207)	140 (17.8 to 276)	42.6 (16.3 to 79.4)	43.8 (32 to 56.1)	1.18 (-35.3 to 29.4)	8420
	Medicare	157 (74.2 to 250)	147 (7.83 to 308)	42.2 (17.4 to 75.1)	39.2 (28.7 to 50.2)	-3.07 (-36.7 to 23.5)	Cost-saving
	Private	137 (64.3 to 221)	145 (23 to 271)	40.5 (17.4 to 71.1)	43.5 (31.8 to 55.7)	2.98 (-26.8 to 28.6)	20600
PENNSYLVANIA	All	152 (76.3 to 240)	156 (57 to 263)	49.8 (21.4 to 83.6)	38.1 (27.8 to 48.8)	-11.7 (-47.9 to 16.3)	Cost-saving

	Medicaid	156 (74.7 to 257)	151 (-42.3 to 356)	51.5 (21.4 to 91.3)	39.5 (28.9 to 50.6)	-12 (-52.5 to 18.8)	Cost-saving
	Medicare	160 (75.8 to 263)	152 (20.8 to 307)	50 (21.4 to 87.4)	35.5 (26 to 45.5)	-14.5 (-51.7 to 13.2)	Cost-saving
	Private	142 (61.8 to 230)	164 (17 to 317)	49.4 (21.9 to 84.4)	40.1 (29.3 to 51.4)	-9.39 (-45.8 to 18.7)	Cost-saving
RHODE ISLAND	All	168 (85 to 263)	157 (61.6 to 250)	50.1 (21.8 to 84.1)	39.6 (28.9 to 50.8)	-10.5 (-46.5 to 20.2)	Cost-saving
	Medicaid	152 (74.9 to 243)	152 (34 to 284)	52.8 (20.5 to 92.5)	41.9 (30.6 to 53.8)	-10.9 (-51 to 22.8)	Cost-saving
	Medicare	194 (90.6 to 315)	153 (-0.547 to 311)	50.9 (22.4 to 88)	36.6 (26.7 to 47)	-14.3 (-54.4 to 17)	Cost-saving
	Private	149 (73.6 to 241)	154 (20.4 to 291)	49 (22 to 83.5)	40.5 (29.6 to 51.8)	-8.52 (-43 to 21)	Cost-saving
SOUTH CAROLINA	All	167 (83.8 to 266)	156 (78.6 to 235)	38.9 (17.6 to 65.4)	37.3 (27.3 to 47.9)	-1.54 (-28.8 to 21.3)	Cost-saving
	Medicaid	168 (80 to 272)	168 (37.1 to 309)	38.5 (16.2 to 66.5)	37.5 (27.4 to 48.1)	-1.05 (-30.5 to 21.9)	Cost-saving
	Medicare	174 (88 to 282)	152 (62.4 to 245)	38.7 (16.9 to 68.1)	34.8 (25.5 to 44.6)	-3.9 (-33.3 to 19.4)	Cost-saving
	Private	143 (70.2 to 229)	154 (53.6 to 261)	38.9 (16.9 to 65.2)	40.2 (29.5 to 51.7)	1.29 (-26.2 to 25.5)	8380
SOUTH DAKOTA	All	144 (71.8 to 230)	153 (14.2 to 311)	44.4 (18.7 to 74.3)	40.4 (29.6 to 51.8)	-4.01 (-35.5 to 23.7)	Cost-saving
	Medicaid	131 (53.6 to 239)	148 (-142 to 450)	45.4 (17.1 to 83.7)	42.5 (31.1 to 54.3)	-2.86 (-39.4 to 27.6)	Cost-saving
	Medicare	171 (71.6 to 291)	154 (-95.7 to 448)	45.5 (18.7 to 78.6)	38 (27.8 to 48.6)	-7.52 (-41.8 to 21.4)	Cost-saving
	Private	125 (47.8 to 210)	151 (-42.1 to 382)	43.8 (17.9 to 74.8)	42.5 (31.1 to 54.6)	-1.32 (-33.6 to 26.4)	Cost-saving
TENNESSEE	All	170 (84.6 to 266)	143 (49.2 to 244)	39.1 (17.8 to 64.8)	36.2 (26.5 to 46.4)	-2.85 (-30 to 20.2)	Cost-saving
	Medicaid	163 (75.9 to 267)	142 (-2.14 to 297)	40.4 (16.7 to 70.5)	37.9 (27.7 to 48.5)	-2.52 (-34.8 to 23.7)	Cost-saving
	Medicare	176 (82.2 to 278)	136 (14.8 to 260)	38.2 (16.2 to 63.8)	32.9 (24.2 to 42.3)	-5.32 (-33.1 to 18.5)	Cost-saving
	Private	159 (78.2 to 255)	155 (30.4 to 292)	39.4 (16.8 to 66)	39 (28.5 to 49.9)	-0.432 (-28.8 to 23.8)	Cost-saving
TEXAS	All	154 (78.6 to 242)	145 (67.9 to 224)	39.6 (17.2 to 65.1)	37.4 (27.3 to 47.9)	-2.22 (-28.9 to 22)	Cost-saving
	Medicaid	179 (81.6 to 282)	152 (-6.09 to 334)	41.3 (17.6 to 70.1)	38.3 (28 to 49)	-2.96 (-32.5 to 22.6)	Cost-saving
	Medicare	168 (85.2 to 269)	156 (40.6 to 286)	40 (16.3 to 66.7)	34.5 (25.2 to 44.2)	-5.51 (-32.8 to 19)	Cost-saving
	Private	157 (76.2 to 258)	141 (24.7 to 267)	39.5 (16.8 to 66.7)	38.6 (28.2 to 49.5)	-0.879 (-27.6 to 23.3)	Cost-saving
UTAH	All	142 (70.9 to 226)	148 (64.8 to 235)	41.5 (17.4 to 73.5)	38.5 (28.1 to 49.4)	-3.01 (-35.3 to 22.3)	Cost-saving
	Medicaid	171 (74.1 to 277)	152 (-21.9 to 341)	44.8 (19.3 to 80.7)	40.3 (29.5 to 51.6)	-4.46 (-40.2 to 23.2)	Cost-saving
	Medicare	161 (78.8 to 254)	157 (47 to 274)	41.2 (16.9 to 73.9)	35 (25.7 to 44.8)	-6.29 (-39 to 20.5)	Cost-saving
	Private	119 (57.7 to 191)	143 (45.7 to 255)	40.8 (16.8 to 74.4)	40.4 (29.6 to 51.8)	-0.403 (-33.7 to 25.3)	Cost-saving
VERMONT	All	155 (78.4 to 244)	153 (63.5 to 255)	50.2 (21.3 to 87.9)	41.1 (30.1 to 52.5)	-9.14 (-47.8 to 21)	Cost-saving
	Medicaid	162 (74.8 to 267)	167 (-8.15 to 366)	52.7 (21.3 to 95)	44 (32.2 to 56.4)	-8.73 (-49.5 to 25.3)	Cost-saving
	Medicare	155 (74.6 to 252)	150 (38 to 261)	50.2 (20.3 to 90.8)	38.4 (28.1 to 49.2)	-11.8 (-54.5 to 19.6)	Cost-saving
	Private	144 (68.7 to 230)	153 (22.8 to 281)	51 (20.7 to 87.7)	43.7 (32.1 to 56.1)	-7.34 (-44.8 to 23.3)	Cost-saving

VIRGINIA	All	170 (83.3 to 269)	153 (66.9 to 243)	39.5 (18.1 to 66.9)	37.7 (27.6 to 48.3)	-1.8 (-30.4 to 21.1)	Cost-saving
	Medicaid	162 (76.4 to 268)	144 (17.5 to 289)	40 (17.3 to 69.2)	38.6 (28.4 to 49.5)	-1.41 (-32.5 to 22.9)	Cost-saving
	Medicare	172 (83.6 to 272)	154 (46.9 to 271)	38.7 (17.2 to 64.3)	34.6 (25.4 to 44.4)	-4.01 (-32.4 to 18.8)	Cost-saving
	Private	164 (80.4 to 263)	153 (25.5 to 297)	39.7 (18.4 to 68.8)	40.1 (29.3 to 51.3)	0.414 (-30.6 to 24)	2710
WASHINGTON	All	153 (75.2 to 238)	150 (70.3 to 227)	41.7 (18.5 to 71.6)	41.7 (30.5 to 53.4)	0.0285 (-29.5 to 25)	190
	Medicaid	150 (73.1 to 241)	144 (24.4 to 265)	43.4 (19.7 to 77.8)	42.9 (31.3 to 54.9)	-0.55 (-35.4 to 26.2)	Cost-saving
	Medicare	171 (87.6 to 267)	156 (58.1 to 256)	41.6 (18.2 to 75.6)	38.2 (27.9 to 49)	-3.38 (-37 to 21.7)	Cost-saving
	Private	133 (64.2 to 210)	148 (46.2 to 254)	40.9 (17.7 to 71.6)	43.7 (32 to 56)	2.78 (-27.9 to 28.8)	18800
WEST VIRGINIA	All	169 (85.1 to 268)	138 (60.9 to 223)	38.6 (17.3 to 65.2)	36.8 (26.9 to 47.2)	-1.81 (-31.6 to 20.7)	Cost-saving
	Medicaid	175 (83.4 to 273)	142 (4.11 to 296)	39.8 (17.2 to 68.4)	38.7 (28.2 to 49.7)	-1.12 (-31.1 to 22.5)	Cost-saving
	Medicare	173 (85.3 to 279)	133 (43.5 to 245)	38.2 (16.8 to 65.9)	34.2 (25 to 43.9)	-4.01 (-33.4 to 18.6)	Cost-saving
	Private	139 (69.9 to 221)	142 (36.4 to 259)	38.1 (16.2 to 64.9)	39.3 (28.8 to 50.4)	1.25 (-29.2 to 23.7)	8790
WISCONSIN	All	145 (72.8 to 230)	148 (68.3 to 229)	43.8 (19 to 74.3)	37.7 (27.6 to 48.4)	-6.1 (-39.6 to 20.2)	Cost-saving
	Medicaid	119 (53.1 to 196)	133 (7.67 to 268)	45.7 (18 to 83.9)	40.2 (29.5 to 51.6)	-5.57 (-48.1 to 23.2)	Cost-saving
	Medicare	173 (86.9 to 275)	155 (50.6 to 273)	43.4 (18.3 to 77.8)	34.1 (24.9 to 43.7)	-9.3 (-44.8 to 17.9)	Cost-saving
	Private	130 (61.6 to 212)	148 (46.4 to 262)	43.3 (17.8 to 76)	39.8 (29.1 to 51.1)	-3.49 (-36.8 to 23.3)	Cost-saving
WYOMING	All	159 (80.5 to 250)	151 (51.6 to 251)	41.3 (17.9 to 70.4)	38.4 (28.1 to 49.2)	-2.9 (-33.1 to 21.8)	Cost-saving
	Medicaid	163 (60.2 to 279)	135 (-118 to 414)	43.2 (17 to 80)	40.5 (29.7 to 52)	-2.7 (-40.2 to 26.1)	Cost-saving
	Medicare	185 (86.4 to 299)	152 (-6.34 to 301)	41.4 (17.8 to 72.9)	35.6 (26.2 to 45.7)	-5.77 (-38.4 to 19.8)	Cost-saving
	Private	121 (52.2 to 196)	149 (9.89 to 301)	41 (16 to 73.5)	41.2 (30.1 to 52.9)	0.26 (-31.1 to 26.3)	1740

Abbreviations: CVD, cardiovascular disease; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-years; and UI, uncertainty interval.

Notes: All monetary values are in 2023 US dollars. All costs and QALYs and were discounted by 3% annually.

* Estimates represent the mean differences in projected health and economic outcomes for a national PRx program compared to the usual scenario of current healthcare from 1,000 Monte-Carlo simulations, with 95% uncertainty intervals derived from the 2.5th and 97.5th values.

† Intervention costs include food costs and administrative costs.

†† Net costs in a healthcare perspective, calculated as intervention cost minus healthcare cost averted, compared to usual care. Negative value represents cost saving.

§ ICER in a healthcare perspective is calculated as $Cost/QALYs gained. Cost-saving is defined as net costs < $0 with QALY gain

Table S7. Minimum Intervention Effect Size Required for the Program to Remain Cost-Saving or Cost-Effective from Healthcare Perspective

	Intervention Effect-Size as Percentage of Base-Case Effect*		
States	**Cost-Saving†**	**Highly Cost-effective††**	**Cost-Effective§**
Alabama	95%	76%	38%
Alaska	120%	102%	65%
Arizona	95%	77%	40%
Arkansas	91%	72%	34%
California	106%	87%	48%
Colorado	97%	78%	40%
Connecticut	79%	63%	33%
Delaware	98%	78%	37%
Florida	101%	80%	38%
Georgia	95%	76%	39%
Hawaii	125%	106%	69%
Idaho	98%	81%	46%
Illinois	85%	68%	33%
Indiana	82%	64%	30%
Iowa	84%	67%	33%
Kansas	83%	65%	31%
Kentucky	97%	79%	43%
Louisiana	92%	73%	34%
Maine	76%	62%	33%
Maryland	105%	84%	44%
Massachusetts	81%	66%	37%
Michigan	86%	68%	34%
Minnesota	89%	72%	38%
Mississippi	92%	73%	34%
Missouri	76%	59%	24%
Montana	95%	77%	40%
Nebraska	87%	70%	36%

Nevada	98%	78%	39%
New Hampshire	77%	60%	27%
New Jersey	81%	66%	34%
New Mexico	92%	73%	36%
New York	81%	65%	33%
North Carolina	96%	77%	41%
North Dakota	83%	66%	32%
Ohio	86%	69%	34%
Oklahoma	94%	76%	39%
Oregon	101%	84%	49%
Pennsylvania	77%	61%	30%
Rhode Island	79%	63%	32%
South Carolina	96%	76%	36%
South Dakota	91%	74%	39%
Tennessee	93%	74%	38%
Texas	95%	76%	39%
Utah	93%	75%	39%
Vermont	82%	67%	36%
Virginia	95%	76%	37%
Washington	100%	82%	46%
West Virginia	95%	77%	42%
Wisconsin	86%	69%	35%
Wyoming	93%	75%	38%

[*] Base-case effect size of produce Rx was based on average effect from 20 PRx programs. We estimated that PRx programs increased fruit and vegetable consumption by 0.80 servings/day (95% confidence interval [CI], 0.45 to 1.15), reduced BMI by 0.36 kg/m2 (95% CI, 0.15 to 0.55), and reduced HbA1c by 0.63% (95% CI, 0.28 to 0.98).

[†] Net costs in a healthcare perspective was calculated as healthcare cost-averted minus intervention cost, compared to usual care

[††] Net costs in a healthcare perspective, calculated as healthcare cost-averted minus intervention, compared to usual care. Negative value represents cost saving.

[§] ICER is calculated as $Cost/QALYs gained. Cost-saving is defined as Net costs < $0 with QALY gain

Table S8. Health gains, Costs, and Cost-effectiveness of Produce Prescription for Diabetes among US adults aged 40-79 Years

Outcomes	Estimates (95% UI) *		
	5 years	**10 years**	**lifetime**
Total CVD events averted,	65000 (29600 to 1e+05)	121000 (59300 to 188000)	275000 (131000 to 421000)
First CVD cases averted,	31500 (14100 to 49200)	51700 (24600 to 79800)	76500 (33400 to 123000)
Recurrent CVD events averted	33500 (15400 to 52100)	69700 (33500 to 108000)	199000 (97500 to 3e+05)
QALYs gained†	60500 (34200 to 90100)	122000 (64000 to 179000)	390000 (2e+05 to 583000)
Healthcare costs averted, $ millions††	15.8 (7.85 to 26.1)	28.3 (13.3 to 46.8)	54.1 (24.3 to 90.6)
Productivity costs averted, $ millions††	0.393 (-0.973 to 1.81)	1.49 (-1.25 to 4.51)	6.91 (0.0289 to 14.5)
Intervention costs $ millions‖			
Food costs	12.3 (9.05 to 15.8)	21.8 (16 to 28)	41.2 (30.2 to 52.8)
Administrative costs	2.17 (1.59 to 2.78)	3.84 (2.82 to 4.92)	7.25 (5.32 to 9.29)
Net costs, $ millions§			
Healthcare perspective	-1.3 (-12.3 to 7.65)	-2.68 (-22.2 to 13.6)	-5.63 (-45 to 25.7)
Societal perspective	-1.69 (-12.6 to 7.42)	-4.17 (-24.4 to 12.1)	-12.5 (-51.2 to 19.2)

Abbreviations: CVD, cardiovascular disease; ICER, incremental cost-effectiveness ratio; QALY, quality-adjusted life-years; and UI, uncertainty interval.

* Estimates represent the mean differences in projected health and economic outcomes for a national PRx program compared to the usual scenario of current healthcare from 1,000 Monte-Carlo simulations, with 95% uncertainty intervals derived from the 2.5th and 97.5th values.

†QALYs were discounted at 3% annually.

††Costs were discounted at 3% annually..

¶ Intervention costs include food costs and administrative costs. All costs were inflated to constant 2023 US dollars, and were discounted by 3% annually

§ Net costs from a healthcare perspective were calculated as healthcare cost-averted minus intervention, compared to usual care. Net changes in costs from a societal perspective were calculated as healthcare cost-averted + costs of productivity loss averted- total intervention costs minus, compared to usual care. Negative value represents cost saving.

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