

Healthy Hearts Calculator User Guide

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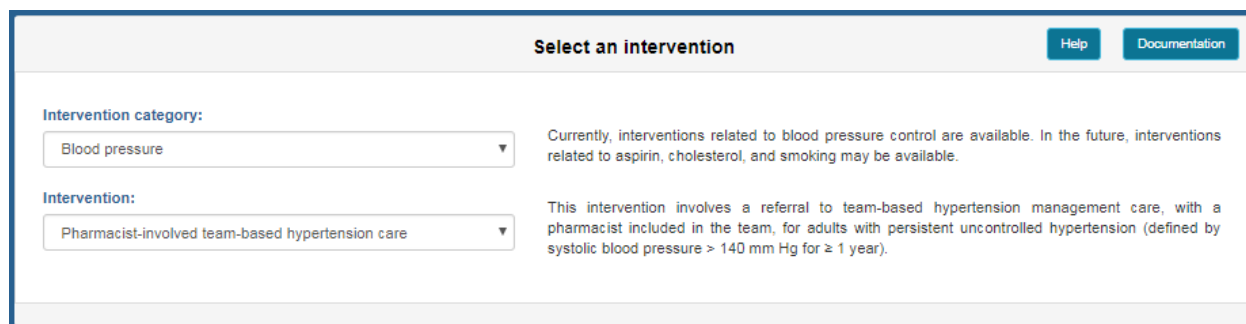
Introduction

Welcome to the Healthy Hearts Calculator User Guide. The Healthy Hearts Calculator website provides estimates of projected health and economic benefits from implementing cardiovascular prevention programs and policies. Target users of this website include state health departments, employers, and health insurers. Results are provided using the HealthPartners Institute ModelHealth™: Cardiovascular disease microsimulation model. This tool was developed with support from the Centers for Disease Control and Prevention (Contracts 200-2017-M-95242 and 75D30118P02514). This User Guide is intended to help orient new users to the Healthy Hearts Calculator.

User Inputs

Step 1: Choose your intervention

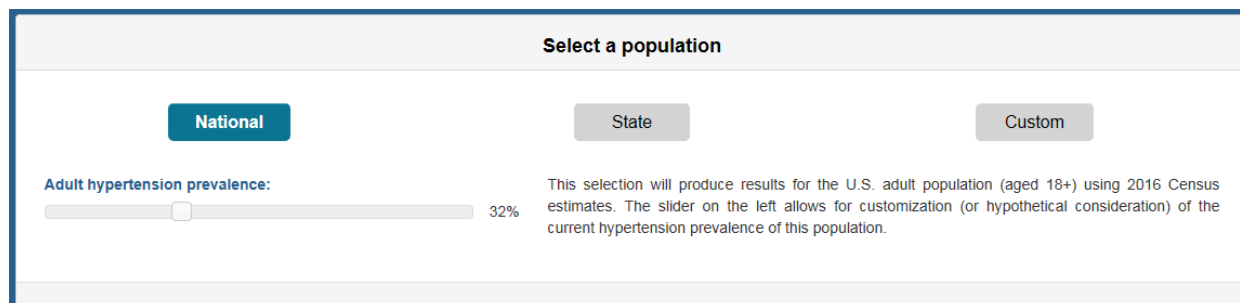
Choose the intervention category (only hypertension control, at this time) and specific intervention of interest.



The screenshot shows a web form titled "Select an intervention". At the top right, there are two buttons: "Help" and "Documentation". Below the title, there are two dropdown menus. The first is labeled "Intervention category:" and has "Blood pressure" selected. The second is labeled "Intervention:" and has "Pharmacist-involved team-based hypertension care" selected. To the right of the first dropdown, there is explanatory text: "Currently, interventions related to blood pressure control are available. In the future, interventions related to aspirin, cholesterol, and smoking may be available." To the right of the second dropdown, there is more text: "This intervention involves a referral to team-based hypertension management care, with a pharmacist included in the team, for adults with persistent uncontrolled hypertension (defined by systolic blood pressure > 140 mm Hg for ≥ 1 year)."

Step 2 (National population): Define your population

If seeking results for the U.S. population, select the National population. You may also optionally adjust the risk factor profile associated with the selected intervention category (e.g., hypertension prevalence).



The screenshot shows a web form titled "Select a population". At the top, there are three buttons: "National" (which is highlighted in blue), "State", and "Custom". Below these buttons, there is a section labeled "Adult hypertension prevalence:". To the left of this label is a horizontal slider bar with a white knob. To the right of the slider bar, the text "32%" is displayed. To the right of the slider and text, there is explanatory text: "This selection will produce results for the U.S. adult population (aged 18+) using 2016 Census estimates. The slider on the left allows for customization (or hypothetical consideration) of the current hypertension prevalence of this population."

Step 2 (State population): Define your population

If seeking results for a state population, select your state from the drop down box. You may also optionally adjust the risk factor profile associated with the selected intervention category (e.g., hypertension prevalence).

The screenshot shows the 'Select a population' interface with the 'State' button selected. It includes a 'National' button, a 'State' button, and a 'Custom' button. A dropdown menu for 'State' is set to 'Alabama'. Below it, a slider for 'Adult hypertension prevalence' is set to 41%. A text box explains that this selection produces results for the adult population (aged 18+) of the state selected, with a slider for customization of the current hypertension prevalence.

Step 2 (Custom perspectives): Define your population

If seeking results for a custom population, provide the size of your population (i.e., the number of employed or insured persons) and then customize the demographic makeup of your population according to age, sex, and race/ethnicity characteristics. You may also optionally adjust the risk factor profile associated with the selected intervention category (e.g., hypertension prevalence).

The screenshot shows the 'Select a population' interface with the 'Custom' button selected. It includes 'National', 'State', and 'Custom' buttons. The 'Population size (age 18+)' is set to 10,000. The 'Race/ethnicity' section has sliders for White non-hispanic (68%), Black non-hispanic (12%), Hispanic (14%), and Other (6%). The 'Age' section has sliders for 18-44 (50%), 45-64 (36%), 65-74 (10%), and >74 (4%). The 'Sex' section has sliders for Men (48%) and Women (52%). The 'Hypertension prevalence' is set to 29%. A text box explains that this selection produces results for a population customized to specifications with respect to size, age, sex, and race/ethnicity make-up, with a slider for customization of the current hypertension prevalence.

Step 3: Choose your analytic perspective

Choose whether you would like to specify your population and view results from the Societal (e.g., a public health department), Insurer, or Healthcare Delivery System Perspective.

The Societal perspective incorporates the most comprehensive accounting of costs, including all intervention costs (including accounting for intervention participant time), averted medical costs from prevented incidence of disease, and averted losses in productivity due to prevented or delayed incidence of disease.

The Insurer perspective includes all financial costs for delivering an intervention, but excludes the cost of intervention participant time. The Insurer perspective also includes averted medical costs from prevented incidence of disease, but does not include effects of an intervention on productivity. Insurer perspectives include: All insurers, Medicaid, Medicare, and Private insurers.

The Healthcare Delivery System perspective includes the non-reimbursed portion of financial costs for delivering an intervention and the portion of shared savings for averted medical costs from prevented disease incidence attributable to the intervention. The Health Delivery System perspective does not include intervention effects on participant time or productivity.

Select an analytic perspective

Societal

Insurer

Healthcare Delivery System

The societal perspective incorporates the most comprehensive accounting of costs, including all intervention costs (including accounting for intervention participant time) [you can define these costs in the section below], averted medical costs from prevented incidence of disease, and averted losses in productivity due to prevented or delayed incidence of disease.

Step 4: Specify the effect size and intervention costs

Finally, choose the desired intervention effect size (e.g., low, medium, or high) and describe the expected per person per year intervention costs and any fixed costs associated with implementing the intervention. If proceeding from the employer perspective, the share of averted medical costs from prevented disease events that is expected to be retained as savings to insurance plan costs can be specified, as well as any per person per year productivity losses expected from an employee who has experienced a major cardiovascular disease event.

Specify the effect size & intervention cost

Effect size:

Medium▼

This is the primary effectiveness estimate. Effectiveness of intervention (-8.5 mm Hg systolic blood pressure) is based on the average effectiveness among 20 trials meeting intervention criteria. Details on the studies informing the estimate of effectiveness for this intervention can be found [here](#).

887

Per person per year intervention cost (\$) ?

0

Fixed program cost (\$) ?

Population use rate of intervention among eligible population:

Current use:

0%

Target use:

90%

The sliders above represent the current use and prospective (or targeted) adoption of the intervention among the target population. These sliders can be adjusted to estimate the impact of a specific incremental uptake of the intervention. The default values are based on a 2016 study by [Dehmer et al](#).

Results

Step 5: Generate results

Proceed to generating results for the selected options by clicking the “Begin” button.



Step 6: View results

Results are presented in separate panes for the following outcome dimensions: process measures, health outcomes, net costs, and disease costs. Additional metrics can be selected by using the drop down box in each pane.



Step 7: Revise selections

Below the results panes, the effect size and intervention cost parameters may be modified, with results to be updated on-the-fly. Or you can return to review other choices, including the user perspective, intervention selection, and population definition.

Specify the effect size & intervention cost

Effect size:

Medium

This is the primary effectiveness estimate. Effectiveness of intervention (-8.5 mm Hg systolic blood pressure) is based on the average effectiveness among 20 trials meeting intervention criteria. Details on the studies informing the estimate of effectiveness for this intervention can be found [here](#).

887 Per person per year intervention cost (\$) ?

0 Fixed program cost (\$) ?

Update

Population use rate of intervention among eligible population:

Current use: 0% Target use: 90%

The sliders above represent the current use and prospective (or targeted) adoption of the intervention among the target population. These sliders can be adjusted to estimate the impact of a specific incremental uptake of the intervention. The default values are based on a 2016 study by [Dehmer et al.](#)

[Return to parameter selection](#)