

# Arizona Health Improvement Plan

## *Heart Disease*

Criteria	Health Issue Data/Information
<p><b>Scope or Magnitude of the Problem</b></p> <ul style="list-style-type: none"> <li>How many people across Arizona are affected by the health issue?</li> </ul>	<ul style="list-style-type: none"> <li>In 2012, 21% deaths in Arizona were caused by heart disease</li> <li>Smoking, obesity, high cholesterol and high blood pressure increase risk for heart disease. In Arizona 19% of adults smoke, 25% are obese, almost 40% have high cholesterol, and over 27 % have high blood pressure</li> </ul>
<p><b>Severity (Morbidity / Mortality)</b></p> <ul style="list-style-type: none"> <li>Does the health issue result in death, disability, or ongoing illness?</li> </ul>	<ul style="list-style-type: none"> <li>In 2012, 76,031 hospitalizations in Arizona were due to cardiovascular disease. That is more than 208 hospitalizations each day in Arizona due to heart disease</li> <li>In 2012, there were 10,366 deaths attributed to heart disease in Arizona</li> </ul>
<p><b>Potential to Impact (Winnable Battle)</b></p> <ul style="list-style-type: none"> <li>What resources (funding, workforce, programs, etc.) are available to address the health issue?</li> <li>Can progress be made on the health issue within five years?</li> <li>Could addressing the health issue also address other problems at the same time?</li> </ul>	<ul style="list-style-type: none"> <li>CDC Funding (through prescriptive grant and action plans targeting specific aspects of heart disease (hypertension)</li> <li>Proposition 303 Tobacco Tax revenue</li> <li>Community Partners with shared goals (county health departments, American Heart Association, etc.)</li> <li>Yes. Health care systems-based progress can be made in 5 years by targeting health information technology. This will allow patients to be better managed and their risk factors controlled through integration of health data allowing providers to see the “whole patient” and monitor risk factors (even during unrelated medical visits). This will lead to improved medication adherence, better control of risk, early identification of risk factors or co-morbid conditions</li> </ul>
<p><b>Cost-Effectiveness</b></p> <ul style="list-style-type: none"> <li>What is the cost of not addressing the health issue? For example, how does it impact health care costs or Medicaid costs?</li> <li>How much money can be saved by addressing the problem?</li> <li>Does the money put into a solution reduce costs</li> </ul>	<ul style="list-style-type: none"> <li>The average charge (for all payers) of a heart disease-related hospitalization (aggregating all CVD conditions) is more than \$80,000</li> <li>For Medicaid in 2012 this average was more than \$92,000<sup>1</sup></li> <li>There are over 120,000 hospital stays (days in the hospital) each year relating to CVD in AZ with a cost above \$4.2 Billion<sup>2</sup></li> <li>With improved prevention, disease identification and management, hospital stays would decrease. This is the most expensive part of the equation. Keeping Arizonans out of the</li> </ul>

<sup>1</sup> <http://hcupnet.ahrq.gov/HCUPnet.jsp>

<sup>2</sup> <http://www.azdhs.gov/azcvd/documents/pdf/az-burden-of-cardiovascular-disease.pdf>

<p>enough to make the solution worthwhile?</p> <ul style="list-style-type: none"> <li>• What's the value of addressing the health issue?</li> </ul>	<p>hospital through both risk and disease management could save millions each year</p> <ul style="list-style-type: none"> <li>• Another costly factor is the lost time from work, productivity, family impact, rehabilitative costs, ongoing support and recovery, etc. Making the value of addressing this issue well worth the return on investment</li> </ul>
<p><b>Quality of Life</b></p> <ul style="list-style-type: none"> <li>• How does the health issue impact daily living activities?</li> <li>• How does it impact usual activities, such as work, self-care, or recreation?</li> </ul>	<ul style="list-style-type: none"> <li>• Heart disease has a tremendous impact on daily activities. There is the initial impact of time lost from work due to an acute event (heart attack, hospitalization from other related conditions, etc.) Coronary heart failure places substantial physical limitations on a sufferer's ability to move around normally due to the heart's diminished ability to pump blood</li> <li>• Studies have shown a correlation between coronary artery disease (CAD) and depression - 10-40% occurrence after being diagnosed</li> <li>• Also, the prevalence of anxiety in those with CAD has been reported at 36% with a lifetime report of anxiety disorder of 45%</li> </ul>
<p><b>Disparities</b></p> <ul style="list-style-type: none"> <li>• How are groups of people affected differently by the health issue?</li> <li>• Are some groups of people more likely to be affected by the health issue than others? How significant are the differences?</li> <li>• Types of disparities can include but are not limited to racial and ethnic groups, geographic location, age, gender, income, education, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• The highest rate of hospitalization from CVD in Arizona was among Whites 139.6 per 10,000 population</li> <li>• The second highest rate of hospitalizations was among African Americans at 114.5 per 10,000 population. When comparing this to the mortality rates discussed in the previous paragraph, African Americans are hospitalized less for CVD, even though they have the highest mortality rate by a large margin</li> <li>• The lowest rate of hospitalizations occurred in the American Indian population at 36.2 per 10,000 population. The hospitalization rate for the American Indian population is artificially low because the state database for hospitalization does not capture events at Indian Health Service facilities</li> <li>• The age-adjusted mortality rate in 2005 for heart disease among males was more than 60 percent higher than the rate among females, 237.4 vs. 147.3 In Arizona, African American women are more likely to die of heart disease than all other female populations with a mortality rate of 266.2. Within the male population, Hispanic men are most likely to die from heart disease, with a mortality rate of 242.2</li> </ul>
<p><b>Evidence-based Models Exist</b></p> <ul style="list-style-type: none"> <li>• Are evidence-based models relevant to cultural and geographic differences? For example, will they work in rural as well as urban communities?</li> </ul>	<ul style="list-style-type: none"> <li>• Yes. Due to the high historic prevalence of heart disease, many evidence-based models are available and tailored for cultural, geographic, and demographic differences, for example: <ul style="list-style-type: none"> <li>○ <i>Your Heart – Your Life /Su Corazon, Su Vida</i> (Latinos/Latinas)</li> <li>○ <i>With Every Heartbeat</i> (African Americans)</li> <li>○ <i>Honoring the Gift of Heart Health</i> (Native Americans)</li> </ul> </li> </ul>

<p><b>Community Readiness / Interest in Solving</b></p> <ul style="list-style-type: none"> <li>• What’s the degree of public support and/or interest in working on the health issue?</li> <li>• Which counties include this issue as a community health priority?</li> </ul>	<ul style="list-style-type: none"> <li>• The degree of public support is high for working in this area. Almost everyone knows someone who suffers from heart disease, or who had died from heart disease-related factors</li> <li>• All counties in Arizona have targeted several heart disease-related risk factors as their community health priorities<sup>3</sup></li> </ul>
<p><b>Arizona Ranking below the US data</b></p> <ul style="list-style-type: none"> <li>• Is Arizona doing better or worse than the U.S.?</li> <li>• How much better or worse are we doing compared to the nation?</li> </ul>	<ul style="list-style-type: none"> <li>• Arizona ranks 6<sup>th</sup> best in the U.S. for performance addressing heart disease, and is in the second quartile for reported heart disease prevalence between 5.3% - 5.7%. Death rates for men are 46<sup>th</sup> lowest, and for women are 44<sup>th</sup> lowest (BRFSS 2010)</li> </ul>
<p><b>Political Feasibility</b></p> <ul style="list-style-type: none"> <li>• Is there enough support from elected officials or other policymakers to help move a strategy to implementation?</li> </ul>	<ul style="list-style-type: none"> <li>• Support among elected officials is moderate, and it should be noted that most advances in the treatment of heart disease have occurred within the systems of care (e.g. CPR initiative), and that policy development is mostly carried out by stakeholders (e.g. HB 2491, initiated by the American Heart Association)</li> </ul>
<p><b>Trend Direction</b></p> <ul style="list-style-type: none"> <li>• Has the health issue been getting better or worse over time?</li> </ul>	<ul style="list-style-type: none"> <li>• Death rates have been trending downwards – most likely due to better interventions, but the prevalence rate of the disease is climbing and expected to increase as the “baby boomer” generation continues to age into and through the highest risk factor years (65+)</li> </ul>

<sup>3</sup> <http://www.azdhs.gov/diro/excellence/documents/az-state-health-assessment.pdf>