



PROGRESS UPDATE: JANUARY 2011

OREGON STATEWIDE PLAN FOR HEART DISEASE AND STROKE PREVENTION AND CARE

Oregon
Health
Authority

PUBLIC HEALTH DIVISION
Health Promotion and Chronic Disease Prevention

OREGON STATEWIDE PLAN FOR HEART DISEASE AND STROKE PREVENTION AND CARE



Heart disease and stroke are the second and third leading causes of death in Oregon.ⁱ In 2005, Oregon's Statewide Plan for Heart Disease and Stroke Prevention and Care (Statewide Plan) was developed by Oregon's Coordinating Council for Heart Disease and Stroke in order to create a vision for the prevention, early detection, treatment and self-management of these diseases and their related risk factors. The Statewide Plan identified goals and objectives thought to be achievable by June 2011. This document is a progress report of that plan and identifies areas in which Oregon has seen success and where more progress is necessary. This report is organized using the colors of traffic lights as a guide: green for objectives Oregon is on target for accomplishing; yellow for objectives in need of more progress; and red for objectives for which there is no information or measure of progress available.

In order to reflect suggested national guidance, Oregon Coordinating Council for Heart Disease and Stroke guidance, and the progressive development of disease, the Statewide Plan was organized into topic areas. These areas are: Support for Healthy Lifestyles; Risk Factor Reduction and Management; Acute Care; Rehabilitation, Long-Term Care and End-of-Life Care; and Data Surveillance and Outcomes Management. This progress report on the Statewide Plan follows this same framework.

Action Topic: Support for Healthy Lifestyles

Goal: Oregon supports healthy eating, daily physical activity, healthy weight, and tobacco-free lifestyles for all residents, as a means of preventing and managing heart disease and stroke.

Summary

Overall, Oregon has made tremendous progress in Support for Healthy Lifestyles since 2005. Oregon currently funds 12 Local Public Health Authorities to implement policies for the prevention, early detection and self-management of chronic diseases. Seven (out of nine) Federally Recognized Tribes in Oregon and 20 (out of 34) Local Public Health Authorities receive funding to build capacity for chronic disease prevention, and early detection and self-management through community assessment and planning. In addition, all 34 Local Public Health Authorities (representing 36 counties) and all nine Federally Recognized Tribes have funding for tobacco prevention programs to implement tobacco-free policies and build tobacco-cessation referral systems within their communities.

Oregon has seen an increase in healthy worksites across the state. This progress is reflected in an increase in the number of smokefree worksites, as well as in the promotion of healthy food options for employees. Oregon has also seen success on a statewide level for health promotion policies: the revised Indoor Clean Air Act, implemented in January 2009, was strengthened to remove exemptions for bars, restaurants, bingo halls and bowling alleys, as well as requiring 75 percent of motel rooms in a facility to be smokefree, protecting nearly all of Oregon's 1.75 million workers; and in January 2010 Oregon's new Menu Labeling Law was implemented, requiring the provision of nutritional information, including numbers of calories, fat and sodium, to customers upon request at chain restaurants. There have also been numerous successes at the local level, including menu labeling at county government building cafes, installation of bike racks at farmer's markets, tobacco-free policies implemented in community colleges, hospitals, county government properties, skate parks and playgrounds, and healthy food requirements for park vendors.



Objective: Increase the number of communities with partnership groups promoting access to healthy foods, opportunities for physical activity, and smokefree environments, especially for populations with heart disease and stroke disparities.

Indicator: Number of communities funded by Healthy Communities to promote healthy lifestyles at the population level.*

Data Source: Healthy Communities Project grant reports.

Criteria for Success: By June 2011, the number of Oregon communities funded for Healthy Communities and subsequently promoting healthy lifestyles to reduce cardiovascular disease or its risk factors will increase by 12.

Progress Update: As of July 2010, all of Oregon's 36 counties are receiving Tobacco Prevention and Education Program funds; 12 receive funding under the Healthy Communities Implementation Program; and 22 are receiving Healthy Communities Building Capacity Program funds. All nine of Oregon's Federally Recognized Tribes are receiving Tobacco Prevention and Education Program funds, and seven are receiving Healthy Communities Building Capacity Program funds.



Objective: Increase the proportion of Oregon employers providing worksite health promotion programs, policies and environmental supports that encourage physical activity, healthy food choices and limited exposure to secondhand smoke.

Indicator: Proportion of employers with worksite policies.

1. Limiting employee exposure to secondhand smoke;
2. Promoting employee opportunities for physical activity;
3. Promoting healthy food choices for employees.

Data Source: Healthy Worksite Initiative Employer Survey.

Criteria for Success:

1. By June 2011, the proportion of Oregon employers with policies limiting employee exposure to secondhand smoke will increase by 5 percent.

Progress Update: Between 2005 and 2008, the proportion of Oregon employers with a written tobacco policy increased from 78.5 percent to 85.4 percent.

2. By June 2011, the proportion of Oregon employers with policies promoting employee opportunities for physical activity will increase by 5 percent.
Progress Update: Between 2005 and 2008, the proportion of Oregon employers with a flextime policy increased from 17.2 percent to 18.3 percent, and the proportion of Oregon employers with a stretching policy increased from 76.5 percent to 76.7 percent.
3. By June 2011, the proportion of Oregon employers with policies promoting healthy food choices for employees will increase by 5 percent.
Progress Update: Between 2005 and 2008, the proportion of employers with a written policy supporting healthy food choices increased from 11.4 percent to 19.4 percent.



Objective: Increase the number of state and local government policies that support healthy lifestyles.

Indicator: Number of policies passed, or improved or enacted by state, tribal or local government to promote physical activity, healthy eating, or protection from secondhand smoke.*

Data Source: Oregon Health Promotion and Chronic Disease Prevention Program (HPCDP) Policies records; Legislative Information Notification and Update System (LINUS).

Criteria for Success: By June 2011, the number of policies enacted by state, tribal, and local government to promote healthy lifestyles will increase by 5.

Progress Update: The number of policies enacted by state, tribal, and local governments to promote healthy lifestyles enacted has exceeded 5:

- The Oregon Department of Human Services (DHS) implemented a tobacco-free policy for all DHS workplaces, protecting up to 13,000 employees from secondhand smoke exposure.
- The 2009 statewide Indoor Clean Air Act protects nearly 100 percent of Oregon's 1.75 million employees.
- The Oregon community college tobacco-free policy program protects approximately 188,000 students and 5,100 employees from secondhand smoke exposure at work and school.

- As of July 2010, there were more than 40 smokefree hospitals in Oregon, protecting more than 27,000 full-time and 15,000 part-time hospital employees, and patients during more than 1 million acute inpatient days and 7 million outpatient visits.
- Various county and tribal health departments and partners have passed tobacco-free policies, healthy meeting policies, menu labeling policies and flextime policies.

*Note: Some of the original objectives and indicators were revised in order to better reflect available data.



Action Topic: Risk Factor Reduction and Management

Goal: Oregonians receive evidence-based, culturally appropriate identification and treatment of risk factors for heart disease and stroke.

Summary

Since 2005, there has been moderate success in the topic area of Risk Factor Reduction and Management. The number of Oregonians diagnosed with high blood pressure that is under control has increased. In addition, there has been a large increase in the numbers of Oregonians diagnosed with cardiovascular disease, related risk factors, and/or diabetes who have completed Living Well with Chronic Conditions (Chronic Disease Self-Management Program – CDSMP) workshops as well as an increase in the proportion of Oregonians with diabetes who have participated in diabetes self-management and education classes.

Oregon has had limited success in increasing the proportion of employees with health benefits coverage for tobacco cessation, blood pressure and cholesterol control and chronic disease self-management. As of January 2010, all private insurance agencies in Oregon must provide, at minimum, a \$500 tobacco-cessation lifetime benefit for beneficiaries over 15 years of age. This law does not cover publicly-funded health insurance plans or plans outside Oregon, and not all employers are offering this benefit to their employees. There has been some momentum around providing chronic disease self-management classes as a covered benefit; that success appears to be very limited and localized and is currently difficult to measure on a statewide basis. Oregon Health Authority partners have been meeting to discuss strategy, feasibility, barriers and timelines for implementing and evaluating chronic disease self-management reimbursement. In January 2011, the Health Services Commission approved Medicaid reimbursement for disease management, including chronic disease self-management programs meeting specified criteria for hypertension, coronary heart disease and congestive heart failure.

In 2007, data indicated that the proportion of Oregonians who are aware of the risk factors for cardiovascular disease was quite high on average; therefore, it would be very difficult to achieve or detect much of an increase in awareness on a population-wide level in 5 years. In addition, the original data source for this objective, the General Knowledge Survey, has not been conducted since 2007 to provide comparative data.



Objective: Increase the proportion of Oregonians with high blood pressure having blood pressure under control.*

Indicator: Proportion of Oregonians diagnosed with high blood pressure who have blood pressure under control.*

Data Source: Risk Factor Surveillance System (BRFSS).

Criteria for Success: By June 2011, the proportion of Oregonians diagnosed with high blood pressure who maintain blood pressure under 140/90 will increase by 5 percent.

Progress Update: Between 2004 and 2008, the proportion of Oregonians diagnosed with high blood pressure who controlled their blood pressure increased from 65 percent to 68 percent.



Objective: Increase the number of patients with cardiovascular disease, cerebrovascular disease, and diabetes who participate in self-management behaviors to reduce their risk for acute events and improve their quality of life.

Indicator:

1. Number of Oregonians with cardiovascular disease or diabetes who have completed Living Well with Chronic Conditions workshops;*
2. Number of Oregonians with diabetes who practice self-management behaviors.

Data Source: Living Well participant reports; Behavioral Risk Factor Surveillance System (BRFSS)

Criteria for Success:

1. By June 2011, the number of Oregonians with heart disease, stroke or diabetes who have completed chronic disease self-management workshops will increase by 5 percent.

Progress Update: Between 2005 and 2009 there was an increase of more than 1,900 percent in the number of chronic disease self-management workshop participants with high blood pressure (from 70 to 1,465); an increase of more than 2,400 percent of participants with high cholesterol (from 44 to 1,142); an increase of more than 1,000 percent of participants with heart disease (from 54 to 623); an increase of more than 1,700 percent of participants who had a stroke

(from 9 to 167); and an increase of more than 1,500 percent of participants with diabetes (from 64 to 1,075).

2. By June 2011, the proportion of Oregonians with diabetes who participate in diabetes self-management education classes will increase by 5 percent.

Progress Update: Between 2005 and 2007, the proportion of Oregonians with diabetes who participated in diabetes self-management education classes increased from 68.3 percent to 72.5 percent.



Objective: Increase the proportion of Oregon employees with health insurance coverage for tobacco cessation, blood pressure and cholesterol control, and chronic disease self-management.

Indicator: Proportion of Oregon employees with health insurance coverage for smoking cessation, blood pressure or cholesterol control, and/or chronic disease self-management.*

Data Source: Heart Disease and Stroke Prevention (HDSP) Program reports.

Criteria for Success: By June 2011, the proportion of Oregon employers providing insurance benefits to cover smoking cessation, blood pressure and cholesterol control, and chronic disease self-management will increase by 5 percent.

Progress Update: Legislation went into effect January 1, 2010, that requires private insurance companies located inside Oregon to cover a \$500 tobacco-cessation lifetime benefit for beneficiaries over 15 years of age. However, the law does not cover publicly-funded insurance plans or plans outside Oregon, and employers are not required to offer this benefit to employees.



Objective: Increase awareness among Oregonians about risk factors for heart disease and stroke.

Indicator: Proportion of Oregonians who are aware of risk factors for cardiovascular disease.

Data Source: General Knowledge Survey (2007).

Criteria for Success:

1. By June 2011, the proportion of Oregonians who know the early signs of heart attack and the appropriate action to take will increase by 5 percent.

Progress Update: In 2007, awareness of the individual heart disease risk factors was already high: smoking 97.3 percent; diabetes 92.1 percent; hypertension 98.6 percent; high cholesterol 94.3 percent; physical inactivity 91.5 percent; obesity/overweight 99.7 percent; and family history of heart disease 97.7 percent. There are no current plans to administer the General Knowledge Survey to monitor a change in these data.

2. By June 2011, the proportion of Oregonians who know the early signs of stroke and the appropriate action to take will increase by 5 percent.

Progress Update: In 2007, awareness of the individual stroke risk factors was already very high: smoking 90.2 percent; diabetes 85.8 percent; hypertension 98.0 percent; atrial fibrillation 80.4 percent; physical inactivity 87.3 percent; and heart disease 90.9 percent. There are no current plans to administer the General Knowledge Survey to monitor a change in these data.

*Note: Some of the original objectives and indicators were revised in order to better reflect available data.



Action Topic: Acute Care

Goal: Oregon provides timely, appropriate care for people experiencing acute cardiac and stroke events.

Summary

Oregon has experienced some progress with the objectives for Acute Care since 2005. Although there was not the desired increase in the proportion of Oregonians who know the early signs of heart attack and the appropriate action to take, Oregon did see an increase in the proportion of Oregonians who know the early signs of stroke and the appropriate action to take. There has been an increase in the number of health systems reporting outcomes data related to cardiovascular care through the work of Health Care Quality Corporation (Q-Corp) and consumers are able to access these data on the Q-Corp website. According to Oregon's Get With the Guidelines (GWTG) Stroke Report, the percent of acute ischemic stroke patients for whom intravenous t-PA was initiated when a patient was eligible increased from 2005 to 2009 among GWTG participating hospitals. In 2009, there were 18 Oregon hospitals participating in GWTG, out of 57 total hospitals in the state. There is not a similar data source (e.g., GWTG) for monitoring whether Oregonians who experience heart attacks are receiving appropriate, evidence-based care. However, based on conversations with providers across the state, there have been regional improvements; for example, the Acute ST Segment Elevation Taskforce (ASSET) in Southern Oregon has achieved success in ensuring that patients experiencing ST-elevated myocardial infarction in a three-county area are receiving primary percutaneous coronary intervention (PCI) when appropriate.



Objective: Increase the proportion of Oregonians who are aware of the early warning signs and symptoms of heart attack and stroke and know the appropriate actions to take.

Indicators:

1. Proportion of Oregonians aware of early signs of heart attack and of appropriate actions;
2. Proportion of Oregonians aware of early signs of stroke and of appropriate action.

Data Source: Behavioral Risk Factor Surveillance System 2005 and 2009; General Knowledge Survey 2007.

Criteria for Success:

1. By June 2011, the proportion of Oregonians who know the early signs of heart attack and the appropriate action to take will increase by 5 percent.
Progress Update: From 2005 to 2009, there has been an increase in the proportion of Oregonians who know the early signs of heart attack and the appropriate action to take from 11 percent to 14 percent.
2. By June 2011, the proportion of Oregonians who know the early signs of stroke and the appropriate action to take will increase by 5 percent.
Progress Update: From 2005 to 2009, there has been an increase in the proportion of Oregonians who know the early signs of stroke and the appropriate action to take from 17 percent to 24 percent.



Objective: Increase the proportion of Oregonians to whom information from local health systems is publicly available regarding quality outcomes related to heart disease and stroke care.

Indicator: Number of health systems reporting quality outcomes data related to cardiovascular care.

Data Source: Heart Disease and Stroke Prevention (HDSP) Program reports.

Criteria for Success:

1. By June 2011, increase the number of insurance plans making cardiovascular outcomes data publicly available by 5 percent.*

Progress Update: There was an increase in the number of health systems reporting on heart attack care and heart failure care in hospitals from zero to eight. The following plans report these data to the Health Care Quality Corporation (Q-Corp): CareOregon; HealthNet of Oregon; Kaiser Permanente; LifeWise Health Plan of Oregon; ODS Health Plan; PacificSource Health Plans; Providence Health Plans; and Regence BlueCross BlueShield. Because these data are available to the public on the Internet at the Q-Corp website, 1.1 million Oregon households have access to cardiovascular outcomes data.ⁱⁱ

2. By June 2011, increase the number of agencies/organizations reporting health care quality outcomes data related to cardiovascular care by 2.

Progress Update: There are two organizations in Oregon that report health care quality outcomes data related to cardiovascular care: the Office for Oregon Health Policy and Research (reporting on heart attack, heart bypass surgery, heart failure and stroke death rates in hospitals) and Q-Corp (reporting on heart attack and heart failure care in hospitals, and cholesterol tests for people recently treated for heart disease).



Objective: Among Oregonians experiencing a heart attack or stroke, increase the proportion receiving appropriate treatment defined by established guidelines.

Indicators:

1. Proportion of Oregonians seen acutely for stroke care who receive appropriate care;
2. Proportion of Oregonians seen acutely for heart attack care who receive appropriate care.

Data Source: Oregon Get with the Guidelines Stroke Report; Acute ST Segment Elevation Taskforce activities.

Criteria for Success:

1. By June 2011, the percentage of acute ischemic stroke patients for whom IV t-PA was initiated when patients are eligible will increase by 5 percent.*

Progress Update: According to Oregon's Get With the Guidelines (GWTG) Stroke Report, the percentage of acute ischemic stroke patients for whom intravenous t-PA was initiated when a patient was eligible increased from 54 percent in 2005 to 79 percent in 2009 among GWTG participating hospitals (18 hospitals out of 57 total hospitals).

2. By June 2011, the proportion of Oregonians seen acutely for heart attack who receive appropriate care will increase by 5 percent.

Progress Update: There is no data system to monitor statewide response to acute heart attack, but some progress has been noted on the local level. For example, activities conducted by the Acute ST Segment Elevation Taskforce (ASSET) in Southern Oregon include pre-notification, pre-registration of STEMI patients, and activation of the STEMI treatment team and catheterization lab prior to arrival at the hospital. Due to the implementation of these activities, door-to-balloon time was reduced from an average of 32 minutes in 2006 to an average of 11 minutes in 2009 at Rogue Valley Medical Center.

*Note: Some of the original objectives and indicators were revised in order to better reflect available data.



Action Topic: Rehabilitation, Long-Term Care, and End-of-Life Care

Goal: Rehabilitation, long-term care and end-of-life care in Oregon ensures quality of life for people with heart disease and stroke.

Summary

Since 2005, there has been no identifiable success in Rehabilitation, Long-term Care, and End-of-Life Care. According to Behavioral Risk Factor Surveillance System (BRFSS) data, there has not been an increase in the proportion of Oregonians with previous heart attacks or strokes who received rehabilitation. Quantitatively defining “culturally and individually appropriate evidence-based rehabilitation services” for measurement purposes presents a challenge. In addition, after discussions with various partners, a comprehensive data system has not been identified for tracking these objectives.



Objective: Increase the percentage of Oregonians with heart attack, heart failure, and stroke receiving timely, culturally, and individually appropriate evidence-based rehabilitation services.

Indicators:

1. Proportion of Oregonians with previous heart attacks who went to rehabilitation;
2. Proportion of Oregonians with previous strokes who went to rehabilitation.

Data Source: Behavioral Risk Factor Surveillance System (BRFSS).

Criteria for Success:

1. By June 2011, the proportion of Oregonians with previous heart attacks who receive outpatient rehabilitation will increase by 5 percent.*
Progress Update: Between 2003 and 2009, the proportion of Oregonians with previous heart attacks who reported receiving outpatient rehabilitation increased from 29 percent to 33 percent.
2. By June 2011, the proportion of Oregonians with previous strokes who receive outpatient rehabilitation will increase by 5 percent.
Progress Update: Between 2003 and 2009, the proportion of Oregonians with previous strokes who reported receiving outpatient rehabilitation decreased from 40 percent to 31 percent.



Objective: Increase the percentage of Oregonians receiving appropriate, evidence-based long-term care for heart disease and stroke.

Data Source: There is no data source available to evaluate this objective.



Objective: Increase the practice of early and routine discussion of treatment options, advance directives, and choices at the end of life for Oregonians with heart disease and stroke.

Data Source: There is no data source available to evaluate this objective.

*Note: Some of the original objectives and indicators were revised in order to better reflect available data.



Action Topic: Data Surveillance and Outcomes Management

Goal: Oregon has the ability to collect and disseminate data about heart disease and stroke in ways that are accessible and useful.

Summary

Surveillance is a key function of public health; as such, Oregon has seen appropriate progress in the achievement of objectives outlined in the Data Surveillance and Outcomes Management category of the plan since 2005. There have been numerous reports and publications released by the Oregon Heart Disease and Stroke Prevention (HDSP) Program to be used for surveillance, program evaluation and future planning. Some of these documents include the 2007 Heart Disease and Stroke Burden Report, the 2007 EMS survey report, the 2008 Hospital Capacity report, fact sheets on Signs and Symptoms of Heart Attack and Stroke (2008) and Hypertension (2010), and a 2010 CD Summary on the scope of the sodium problem in Oregon. These documents have been disseminated through partner networks and are available on the HDSP website (www.oregon.gov/DHS/ph/hdsp/index.shtml).

There are multiple efforts under way to increase the number of useful indicators for describing the prevention and management of heart disease and stroke, as well as health disparities. The Centers for Disease Control's (CDC) Division for Heart Disease and Stroke has released indicators for high blood pressure and high cholesterol, and the Oregon Heart Disease and Stroke Prevention (HDSP) Program is working to operationalize these indicators as appropriate. In addition, there is an initiative in the Health Promotion and Chronic Disease Prevention (HPCDP) section of the Public Health Division that is prioritizing a list of clinical measures; the HDSP program is actively engaged in this project to ensure the inclusion of heart disease and stroke-related indicators. An HDSP research analyst also participates in the HPCDP Surveillance Team and is intricately involved in developing and administering surveys including a statewide Behavioral Risk Factor Surveillance Survey (BRFSS), BRFSS-like surveys of state employees (conducted since 2005) and education system employees (conducted since 2009), a race over-sample of the state BRFSS survey to ensure accurate representation of specific populations, and an employer survey, conducted since 2005, that identifies worksite policies to support healthy living.



Objective: Increase dissemination and use of available data about heart disease and stroke to drive policy change and quality improvement.

Indicators: Number of data reports or fact sheets produced and disseminated on the Web by the Oregon Heart Disease and Stroke Prevention Program.*

Data Source: Oregon Heart Disease and Stroke Prevention Program archive files and website.

Criteria for Success: By June 2011, the number of data and surveillance products will increase by 5.*

Progress update: The following products have been published on the Oregon HDSP website:ⁱⁱⁱ

- 2007 Heart Disease and Stroke Burden Report;
- 2007 EMS survey report;
- 2007 Hyperlipidemia CD Summary (the CD Summary is estimated to have a reach of 15,000 health providers in Oregon);
- 2008 Hospital Capacity report;
- 2008 Signs and Symptoms Fact Sheet;
- 2008 Employer Survey Fact Sheet;
- 2010 Hypertension Fact Sheet;
- 2010 Shake the Salt CD Summary (the CD Summary is estimated to have a reach of 15,000 health providers in Oregon).



Objective: Increase the number of useful indicators describing prevention and management of heart disease and stroke for which data are available.

Indicator: Number of indicators relevant to cardiovascular disease health status for which data are available.

Data Source: Oregon Department of Human Services publications “Keeping Oregonians Healthy,” “Heart Disease and Stroke Prevention Program Burden Report” and other Heart Disease and Stroke Prevention Program fact sheets/reports.

Criteria for Success: By June 2011, the number of cardiovascular health status and health care quality indicators for which statewide data are reported will increase by 5.

Progress Update: With the release of CDC Division for Heart Disease and Stroke Prevention program indicators on High Blood Pressure Control (57 indicators) and High Cholesterol Control (63 indicators), HDSP is working to operationalize some of these indicators for use in the Oregon HDSP work plan. Activities include HDSP staff participation in CDC communities of practice for HDSP indicators with CDC; HDSP participation in the Health Promotion and Chronic Disease Prevention (HPCDP) section-wide clinical measures initiative; HDSP staff working on survey administration and analysis that contribute to the measurement of indicators.



Objective: Increase the number of useful indicators for which data are available that identify and track disparities relating to heart disease and stroke.

Indicator: Number of activities relevant to measuring cardiovascular disease health status disparities.*

Data Source: HPCDP clinical measures initiative and surveillance activities. Behavioral Risk Factor Surveillance System and Behavioral Risk Factor Surveillance System Race Over Sample.

Criteria for Success: By June 2011, the number of activities relevant to measuring cardiovascular disease health status disparities will increase by 5.

Progress Update: The HPCDP clinical measures initiative is working on using measures to identify disparities. The HPCDP surveillance team administers BRFSS-like surveys for state employees and school employees, an employer survey and a BRFSS Race Over Sample that is conducted every 4-5 years to collect data on specific populations (African Americans, American Indians and Asian Pacific Islanders). All of these surveys are used to identify disparities.

*Note: Some of the original objectives and indicators were revised in order to better reflect available data.



A record of successes and challenges

As documented in this report, there have been both successes and challenges in achieving the objectives described in Oregon's 2005 Statewide Plan for Heart Disease Stroke Prevention and Care. The areas of success play an important role in reducing the morbidity and mortality of heart disease and stroke in Oregon. Similarly, the areas for improvement are opportunities for Oregon's heart disease and stroke partners to collaborate to improve the health of all Oregonians at risk for or experiencing heart disease and stroke.

Additionally, the successes identified in this report could not have occurred without the work of many partners working for the prevention, early detection, self-management and treatment of heart disease and stroke in Oregon, including the members of Oregon's original Coordinating Council for Heart Disease and Stroke.

ⁱOregon Death Certificate Data

ⁱⁱwww.oregon.gov/DAS/OPB/docs/PopSurv/2008OPS/OPS_2008_Press_Release.pdf?ga=t

ⁱⁱⁱwww.oregon.gov/DHS/ph/hdsp/index.shtml

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