



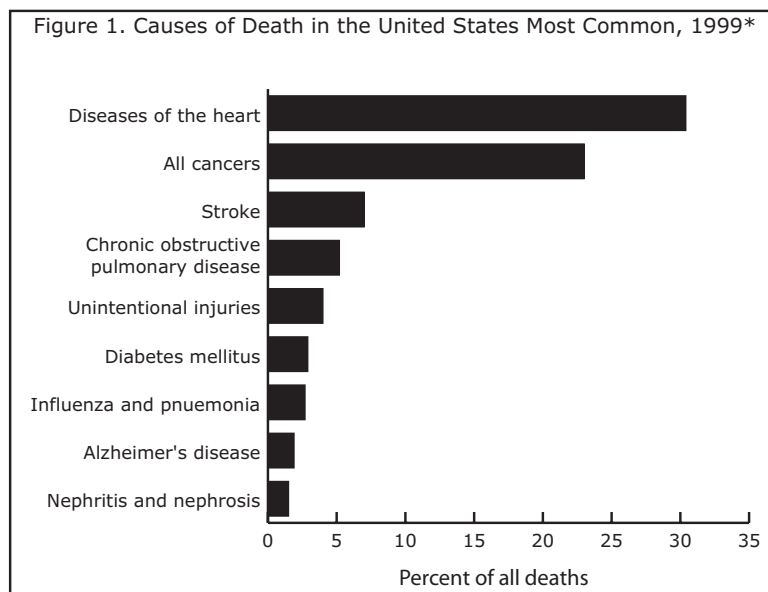
## Quality of Care

### In This FAQ...

- *What is chronic disease? What are the most common chronic diseases and what is the cost of treatment?*
- *What is chronic disease management?*
- *How can states improve the quality of care for people with chronic conditions?*
- *How does Medicaid deliver and pay for the management of chronic conditions?*
- *What is evidenced-based practice?*
- *How do the rates of chronic diseases differ across racial and ethnic groups? How significant are disparities in access to care?*
- *How can states prevent the development of chronic conditions?*

### What is chronic disease? What are the most common chronic diseases and what is the cost of treatment?

Chronic disease is a condition that lasts more than a year, does not resolve on its own and requires ongoing care. The most common chronic diseases are heart disease, cancer, stroke, chronic obstructive pulmonary disease (COPD) and diabetes.

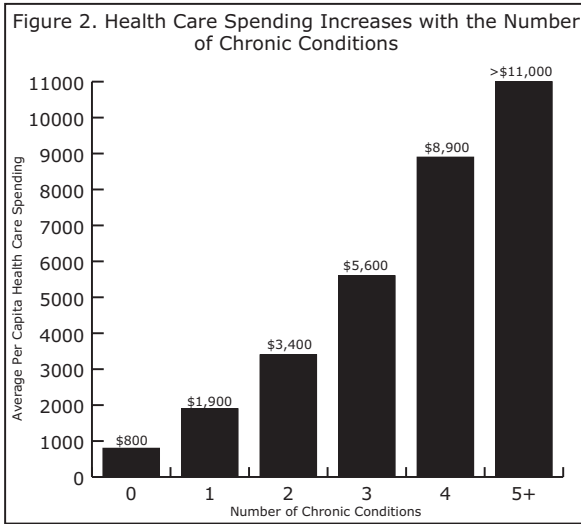


Note: \*All data are age adjusted to 2000 total U.S. population.  
Source: J.M. McGinnis, W.H. Foegen "Actual causes of death in the United States" JAMA 270 (1993):2207-12.


These diseases cause seven of every 10 deaths in the United States annually and affect the quality of life for 90 million Americans (see Figure 1).

The costs of treating chronic disease are staggering. The Centers for Disease Control and Prevention (CDC) estimates that 75 percent of the \$1.4 trillion the United States spends on medical care is devoted to treating people with chronic conditions. In 2002, the direct costs of diabetes alone equaled \$92 billion, and the estimated direct and indirect costs related to smoking were more than \$75 billion.





Source: Medical Expenditure Panel; Survey, 1998.

According to the [Partnership for Solutions](http://www.partnershipforsolutions.org/) (<http://www.partnershipforsolutions.org/>), by 2020, 81 million Americans will be living with one or more chronic disease. Seventy-eight percent of all health care money is spent on caring for people with chronic conditions. The costs of care increase as the number of chronic conditions increases (see Figure 2). The partnership is an initiative that focuses on improving the care and quality of life for those with chronic condition. 

## What is chronic disease management?

Disease management, which dates to the mid-1990s, is a strategy of health care delivery that focuses on patient and practitioner communication, coordinating services, and giving the patient an active role in developing a plan of care. In general, disease management programs emphasize treatment of patients with chronic disease such as diabetes, asthma and heart disease, which are the most costly chronic conditions.

In an effort to contain costs and simultaneously improve health care quality and patient outcomes, states across the country are incorporating disease management programs into their Medicaid programs. Table 1. details some recent state legislative activities.

Table 1. Disease Management Legislative Activities

State	Law	Details
Illinois	Public Act 094-0328 (2005)	The Department of Public Aid must create a comprehensive disease management model for asthma patients, including the early detection, treatment of, and control of the disease.
Indiana	IC 12-15-12-19 (2004)	Amends Indiana's current disease management program to include hypertension and to remove HIV/AIDS. The act directs the creation of a pilot program to cover two of the following diseases: hypertension, asthma, diabetes and congestive heart failure.
Louisiana	La. Rev. Stat. Ann. 39 98.4 § (2004)	Requires that tobacco settlement proceeds be used for certain activities, such as comprehensive chronic disease management.
Mississippi	Miss. Code Ann. 43-13-117 § (2004)	Authorizes a disease management program for individuals with asthma, hypertension and diabetes. The optional program allows individuals to end participation at any time. The law also authorizes an obstetrical care population health management program for women and infants.


Texas	Tex. Gov't. Code Ann. 531.021912 § (2004)	Requires the Health and Human Services Commission to develop a Medicaid disease management pilot program for children's asthma.
	Tex. Health and Safety Code Ann. 62.159 § (2004)	Requires the child health plan, managed health care plans and other health coverage plans to provide disease management services, including patient self-management education, provider education, evidence-based models and minimum standards of care. Chronic health conditions include heart disease, HIV infection, or AIDS, diabetes, respiratory illness and end-stage renal disease.

Source: NCSL, 2007.

In addition to integrating disease management into Medicaid programs, states are encouraging state employee benefit plans and some private health insurers to incorporate disease management principles into their plans. For a complete 50-state summary of disease management laws, go to: <http://www.ncsl.org/programs/health/diseasemgtleg04.htm>.

A few states have had disease management programs long enough to show outcomes. Virginia's was one of the first such programs in the nation. That program, Virginia Health Outcomes Partnership, focused on asthma, showed favorable outcomes but had high overhead costs, and it proved difficult to reliably estimate the cost savings. In 1997, Virginia revised its program and expanded the diseases covered. An evaluation of that program estimated a costs savings of \$1.75 for every \$1 spent. A current Virginia pilot program called Healthy Returns started in 2004. Virginia is developing an evaluation strategy to check the program's cost effectiveness.

In 1997, Florida added disease management—for asthma, diabetes, HIV/AIDS and hemophilia—to its Medicaid program. Since then, Florida has continued to expand the number of diseases covered in its disease management programs. Evaluating these programs has proven difficult, however, because cost savings for chronic conditions are realized over a period of years, there are no immediate results.

From 2002 to 2003, Colorado's Medicaid program implemented a pilot project disease management program for asthmatics. Over a six-month period, the program showed a savings of 37.4 percent compared to baseline costs. This amounted to a cost savings of \$3.15 for every \$1 spent. 

## How can states improve the quality of care for people with chronic conditions?

States can employ several strategies to improve the quality of care for their citizens, including the following:

- Disease management, which has been shown to improve results for individuals and provide significant cost savings to state Medicaid plans.
- Using “pay-for-performance” programs, i.e., physician- and hospital-level incentives to align payment with quality of services.
- Using other incentives to reward physicians for high performance, such as public reports and recognition or referrals of members to a plan or provider.

Along with [disease management](#) and pay-for-performance, states can focus on [prevention](#).

*Pay for Performance:* Pay for performance (P4P) ties reimbursement for services to the quality of care and outcomes. The Centers for Medicare and Medicaid Services defines pay for performance as "...the use of payment methods to encourage quality improvement and patient-focused high value care." States have begun to look at pay-for-performance strategies as a way to improve quality and cost effectiveness in their Medicaid and State Children's Health Insurance Programs (SCHIP). For example, Idaho is incorporating pay for performance into its primary-care case management Chronic Disease Management Program. An initial pilot program will focus on diabetes. The state plans to expand the pay-for-performance strategies to other chronic diseases. The pilot program will use six evidence-based quality indicators. Providers will receive a \$50 incentive for each patient they enroll in a chronic disease management program, and \$10 for each quality indicator that is met.

For more examples, see

[http://www.chcs.org/info-url\\_nocat3961/info-url\\_nocat\\_show.htm?doc\\_id=375137](http://www.chcs.org/info-url_nocat3961/info-url_nocat_show.htm?doc_id=375137).

The [Center for Health Care Strategies](http://www.chcs.org/) (<http://www.chcs.org/>) discusses state activities that have been implemented and offers lessons learned from these experiences in its [Physician Pay-for-Performance in Medicaid: A Guide for States](#)

([http://www.chcs.org/publications3960/publications\\_show.htm?doc\\_id=471272](http://www.chcs.org/publications3960/publications_show.htm?doc_id=471272) ).

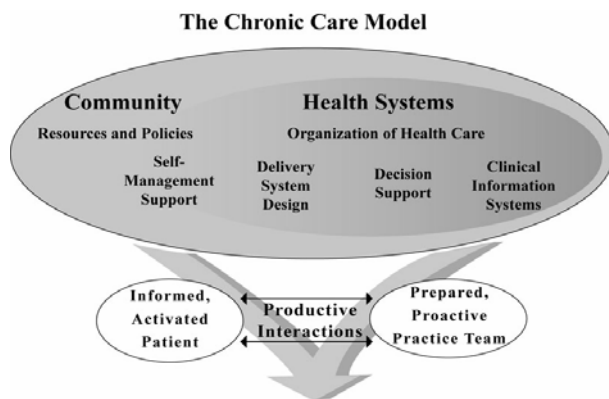
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## How does Medicaid deliver and pay for the management of chronic conditions?

Almost 80 percent of Medicaid expenditures are devoted to providing care to people with chronic diseases. According to the Centers for Medicare and Medicaid Services, 40 percent of children and 60 percent of adults enrolled in Medicaid have one or more chronic conditions.

At present, 26 states have incorporated disease management into their Medicaid programs, although only certain chronic conditions are covered in these programs. The conditions covered by the most states (21) are asthma and diabetes. When deciding which conditions to include, states consider: potential of success in improving outcomes, evidence that expenses can be reduced, and whether common practice guidelines and accepted methods of treatment exist. For more information see [disease management](#).

Figure 3. Improving the Quality of Care



Source: MacColl Institute.

To help them improve the quality of their health care systems, several states have used the Chronic Care Model, developed by Dr. Ed Wagner and the MacColl Institute for Healthcare Innovation. [The Chronic Care Model](#) ([http://www.improvingchroniccare.org/index.php?p=The\\_Chronic\\_Care\\_Model&s=2](http://www.improvingchroniccare.org/index.php?p=The_Chronic_Care_Model&s=2)) identifies the elements of a health care system that can improve the care of people who have chronic conditions. These elements are the community, the health system, support for self-management, delivery system design, decision support and clinical information systems. The model encourages informed, active patient interaction with a prepared, proactive practice team (see Figure 3). For more information about the model

elements see [http://www.improvingchroniccare.org/index.php?p=Model\\_Elements&s=18](http://www.improvingchroniccare.org/index.php?p=Model_Elements&s=18), 

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## What is evidenced-based practice?


Evidence-based practice is medical care that uses current clinical evidence to make decisions about the treatment of a patient. This evidence includes practitioner experience and external clinical research. Evidence-based practice also involves patient consultation.

In 2005, the Center for Health Care Strategies launched the “Medicaid Value” program, also known as “Health Supports for Consumers with Chronic Conditions.” It seeks to identify, strengthen, test and validate best practices, and to provide technical assistance to replicate best practices. Ten Medicaid Value teams around the country are working toward these goals. For more information about these sites and their activities, see [http://www.chcs.org/info-url\\_nocat3961/info-url\\_nocat\\_show.htm?doc\\_id=272035](http://www.chcs.org/info-url_nocat3961/info-url_nocat_show.htm?doc_id=272035).

The Chronic Care model is another example of an evidence-based approach to managing chronic illness. It is based on interventions that have been proven in practice and in research. [http://www.improvingchroniccare.org/index.php?p=Chronic\\_Care\\_Model\\_Literature&s=64](http://www.improvingchroniccare.org/index.php?p=Chronic_Care_Model_Literature&s=64)

For links to condition-specific literature based on the chronic care model, see [http://www.improvingchroniccare.org/index.php?p=Condition-Specific\\_Literature&s=81](http://www.improvingchroniccare.org/index.php?p=Condition-Specific_Literature&s=81).

In 1997, the Agency for Healthcare Quality and Research (AHRQ, <http://www.ahrq.gov/>) created 12 Evidence-Based Practice Centers. These centers develop evidence reports and technology assessments relevant to clinical and health care delivery issues. The centers review all scientific literature and produce evidence reports and technology assessments. For a list of the twelve Evidence-Based Practice Centers, <http://www.ahrq.gov/clinic/epc/epcenters.htm>.

Reports of clinical conditions from the Evidence-Based Practice Centers are available at: <http://www.ahrq.gov/clinic/epcix.htm#clinicalcat>. 

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## How do the rates of chronic diseases differ across racial and ethnic groups? How significant are disparities in access to care?

Disparities are an important quality indicator. If different groups receive different care, then good care is not uniformly provided. Health care disparities are present in all areas of health care, for all populations and for all medical conditions. Racial, ethnic, geographic and socioeconomic differences are associated with varying levels of health care quality. For example, African American women are more than twice as likely to die of cervical cancer than are white women, and African American adults have significantly higher rates of heart disease and stroke than do white adults.

In 2005, AHRQ issued its second [National Health Disparities Report](http://www.ahrq.gov/qual/nhdr05/nhdr05.pdf) (<http://www.ahrq.gov/qual/nhdr05/nhdr05.pdf>). The report measures quality and disparities in four areas: effectiveness, patient safety, timeliness and patient-centeredness. It also presents data on quality and differences in access to services for clinical conditions, including chronic diseases.


**Four themes of the 2005 National Health Disparities Report are:**

- Disparities still exist.
- Some disparities are diminishing.
- Opportunities for improvement remain.
- Information about disparities is improving.

The survey shows that, compared to the previous year, modest improvements have been made in many of the quality measures examined, including increased cancer screening rates and declines in admission rates for uncontrolled diabetes.

Despite gains in the delivery of high-quality care, Asians, American Indians, Alaska Natives and Hispanics receive poorer quality of care than whites for a significant percentage of the quality measures. Poorer people received lower quality of care for about 60 percent of quality measures and had worse access to care for about 80 percent of access measures than those with higher incomes.

The report also found that health care disparities are costly. Poorly managed care or missed diagnoses result in expensive complications that can cause morbidity, disability and lost productivity and that could potentially be avoided.

Lack of English proficiency can contribute to disparities in access and treatment. In several states, Medicaid agencies are working to capture and share with health plans information about languages spoken in enrollees' homes to allow staff to more appropriately match new enrollees and providers. 

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## How can states prevent the development of chronic conditions?

Although chronic diseases are among the most prevalent and costly health conditions, they also are among the most preventable. The CDC reports that:


- Of the 50 million U.S. adults with high blood pressure, 70 percent do not have their blood pressure under control.
- Colorectal cancer screening can reduce the number of colon cancer deaths by at least 30 percent.
- A mammogram every one to two years for women 40 and older reduces the risk of death from breast cancer by about 16 percent.
- Regular eye exams and timely treatment could prevent up to 90 percent of diabetes-related blindness.
- Regular foot examinations and patient education could prevent up to 85 percent of diabetes-related amputations.
- Tobacco use is the single most preventable cause of death in the United States.
- Physical inactivity contributes to disease and disability, accounting for 22 percent of colon cancers, 18 percent of osteoporotic fractures, and 12 percent of cases of diabetes and hypertension.

Policymakers can contribute to reducing the prevalence, health effects and costs of chronic disease by:

- Promoting health and wellness programs at schools, worksites, and health care and community-based settings.
- Enacting policies that promote healthy choices and healthy environments.
- Ensuring access to a full range of quality health services.

- Supporting implementation of programs that focus on eliminating racial, ethnic and socioeconomic-based health disparities.
- Supporting efforts to effectively educate the public about their health and the prevention of chronic disease.
- Seeking to ensure high-quality care for those with chronic conditions.

For more information, see <http://www.ncsl.org/programs/health/chronic-new.htm>

For more information about chronic disease prevention, see [Chronic Disease and Health Costs: A Snapshot for State Legislature](http://www.ncsl.org/programs/pubs/summaries/0166603-sum.htm) (<http://www.ncsl.org/programs/pubs/summaries/0166603-sum.htm>). 



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*Other sources*

**Agency for Healthcare Research and Quality (AHRQ)** provides information on quality safety, effectiveness, efficiency and evidence-based practice in healthcare. <http://www.ahrq.gov/qual/>

**Centers for Disease Control and Prevention (CDC)** provides information on chronic disease prevention and health promotion including information on costs prevalence and surveillance. <http://www.cdc.gov/nccdphp/>

**Center for Health Care Strategies (CHCS)** is a policy resource for information for improving the quality and effectiveness of health care for low income people and those with chronic illnesses and disabilities. <http://www.chcs.org/>

**Partnership for Prevention** is an initiative that focuses on improving the care and quality of life for those with chronic condition. <http://www.prevent.org/>

**Robert Wood Johnson Foundation** supports efforts to improve the quality of care that Americans with chronic illness receive. Their work includes supporting quality improvement strategies as well as reducing racial and ethnic disparities in care. <http://www.rwjf.org/pr/os.jsp?topicid=1053>

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