Dear Iowans:

Within this document, the Iowa Cancer Plan, there is much evidence supporting the importance of comprehensive cancer control in Iowa. But, what I hope you’ll notice first are the faces of real Iowans whose lives have been toppled by cancer. The stories they share are sometimes heart wrenching, sometimes funny, and always moving.

Who do you see reflected in these stories? Perhaps it’s your grandmother, your father, a best friend or a sister. When I see these faces, I think of my father, Edward, and how courageous he was as he fought colon cancer. I am proud to report that, because of early detection, today my father is cancer free.

*Cancer affects us all.* As the second leading cause of death in Iowa, cancer impacts our communities, our friends, our families, and our selves.

The Iowa Cancer Plan, newly revised for 2012-2017, is a guide for cancer control practices across the state. It is also a tool for you as an Iowan. Because we are all changed by cancer, we must all work together to conquer it. There is so much you can do:

- Share the stories and information within this plan.
- Share your own story.
- Participate in cancer control in any way you can.
- Join the Iowa Cancer Consortium.
- Advocate for resources and encourage partnerships in the fight against cancer.
- Visit www.CancerIowa.org to view a dynamic, interactive online version of this plan, to see what others across the state are doing, and to share your own action.

I commend the Iowa Cancer Consortium, its partners, and the passionate individuals and organizations who developed this thorough and evidence-based document. The Iowa Cancer Consortium has shown that through collaboration, much can be accomplished.

To ensure a healthier future for all Iowans, we must continue to hear each others’ stories, tell our own, and most importantly, work together to conquer cancer.

Sincerely,

Terry E. Branstad
Governor
The Iowa Cancer Plan is dedicated to the people of Iowa whose lives have been touched by cancer. These Iowans are the faces of cancer in Iowa and inspire a collaborative effort to reduce the burden of cancer in our state.
Acknowledgements

This plan was created in a spirit of collaboration, and is the result of the work and input of many Iowans. A very sincere thank you to the following for their passion and efforts:

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Comprehensive Cancer Control (CCC) “A process through which communities and partner organizations pool resources to reduce the burden of cancer. These combined efforts help to reduce cancer risk, find cancers earlier, improve treatments and increase the number of people who survive cancer.”

The Iowa Cancer Consortium is a 501(c)(3) organization consisting of a diverse partnership of Iowans working together to conquer cancer. It is a collaboration of cancer survivors, researchers, caregivers, health-care providers, public health professionals, private sector representatives, family members, volunteers, and many others who are passionate about ending the suffering and sadness cancer causes for thousands of Iowans each year.

Formed in 2001 by the Iowa Department of Public Health, the Consortium

- Coordinates comprehensive cancer control efforts in Iowa.
- Funds select programs and projects that work to implement the Iowa Cancer Plan.
- Consists of nearly 150 individuals and partner organizations representing Iowa’s communities.

The Consortium’s mission is to reduce cancer incidence and mortality in Iowa through collaborative efforts that provide services and programs directed toward comprehensive cancer prevention and control.

Cancer is one of the leading causes of death in our state, taking the lives of more than 6,000 Iowans annually. All Iowans have a role in reducing the state’s cancer burden, and are encouraged to use the Iowa Cancer Plan as their guide. The plan provides direction for those involved in the planning, implementation, and evaluation of cancer control programs, research, and policy initiatives. It is also a resource for all Iowans who will find support and advocacy within its pages.

The Iowa Cancer Plan sets forth four goals:

1. Whenever possible, prevent cancer from occurring.
2. If cancer does occur, find it in its earliest stages.
3. Improve the accessibility, availability, and quality of cancer treatment services and programs.
4. Ensure optimal quality of life for people impacted by cancer.

Each goal includes a set of evidence-based cancer control priorities, strategies, and action steps.

Priorities within the plan outline major areas to be addressed within each goal. Strategies identify work that must be done to accomplish the corresponding priority. Action steps contain specific efforts or projects that individuals and organizations can do to further implement each strategy.

At the end of each goal are targets for change. These targets represent the long-term outcomes expected upon successful implementation of a priority, strategy, or action step.

It is impossible for this plan to address every issue and need existing in comprehensive cancer control in Iowa. The goals, priorities, strategies, and action steps in this plan have been determined by the Iowa Cancer Consortium, its partners, and other community members to be the leading evidence-based methods to reduce the burden of cancer in Iowa.

These goals, priorities, strategies, and action steps address all Iowans, even when language does not specify ‘Iowans.’

The 2012-2017 Iowa Cancer Plan is a living document. As the world of cancer evolves, this plan will evolve, too. Visit www.CancerIowa.org to view the interactive and ever-changing version of the plan.

The Iowa Cancer Plan addresses six overarching health issues critical to the success of comprehensive cancer control in Iowa. To accomplish each goal, these issues must be incorporated during implementation of priorities, strategies, and action steps listed in the plan.

A colored ✔ near a strategy indicates that the strategy and its corresponding action steps adhere to one of these issues:

✔ Collaboration
The Iowa Cancer Plan calls for partnerships between organizations, coalitions, businesses, and individuals to maximize resources and reduce duplication.

Coordination, cooperation, and partnership are essential to a comprehensive approach to cancer. In the spirit of collaboration, this plan aligns with other organizations’ plans and goals when possible.

✔ Disparities
The Iowa Cancer Plan addresses cancer health disparities and promotes health equity in Iowa.

Health disparities exist in cancer services among every population in Iowa, including those based on geography, age, socioeconomic status, race, ethnicity, and culture. The implementation of every strategy in this plan must counter associated cancer-related disparities and inequities so that every Iowan can expect the best outcome possible.

✔ Workforce
The Iowa Cancer Plan addresses cancer workforce needs.

Cancer prevention, screening, treatment, and quality-of-life services involve many different types of qualified health-care workers. These workers must be adequately and appropriately trained, and there must be enough of them in every area of the state to ensure all Iowans receive access to the quality services and care they need.

✔ Policy and Systems
The Iowa Cancer Plan promotes advocacy for policy and systems change.

According to the Centers for Disease Control and Prevention, “The policies, systems, and environments around us, including our communities, worksites, transportation systems, schools, faith-based organizations, and health-care settings shape the pattern of our lives and our health.” It is necessary for change and partnerships to occur at these foundational levels to make optimal cancer prevention, screening, treatment, and quality-of-life opportunities accessible to all Iowans.

Research

The Iowa Cancer Plan promotes collaboration among organizations involved with cancer research, and encourages all Iowans to learn more about how they can contribute to progress made possible by cancer research.

Cancer control today differs from cancer control a decade ago. Much of this progress is due to research. Iowa is proud to have contributed important research findings to improve cancer control through prevention, screening, treatment, and quality-of-life services.

Cancer control research takes place at the Holden Comprehensive Cancer Center, one of only 40 National Cancer Institute designated comprehensive cancer centers in the country. Research also occurs in hospitals and physician’s offices across the state, and within the community. Cancer research is supported by the government, not-for-profit organizations, biotechnology companies, pharmaceutical companies, and philanthropists.

Cancer research in Iowa not only includes research into the nature of cancer, and development of new cancer treatments, but also how to apply scientific knowledge to reduce the burden of cancer.

This plan encourages continued support for collaborative cancer research throughout cancer control.

Evaluation

The Iowa Cancer Plan seeks to evaluate cancer control efforts.

The Iowa Cancer Consortium commits to ongoing, complete evaluation measuring the outcomes and effectiveness of work being done. Resources available in comprehensive cancer control should be used in the most efficient manner, leveraging additional funds when possible and implementing the most effective programs and policies.

What is learned from evaluation data can, and is expected to, change the direction of this plan. Based on annual progress reviews, the plan will be updated to reflect new circumstances, changing priorities, and new opportunities. The most up-to-date version of the plan can be found at www.CancerIowa.org.
Who Should Use This Plan?

The simple, yet complete, answer to the question of who should use this plan is ‘Iowans.’ There is no better time than the present to confront cancer in Iowa, and no better way to fight cancer than as a collaborative network of passionate citizens. No one knows how to address Iowa’s cancer burden better than Iowans.

To accomplish the goals in this plan, all Iowans need to be involved, including but not limited to

- Business owners and employers
- Cancer survivors
- Caregivers
- Community-based organizations
- Consumers
- Corporations
- Educators
- Faith-based organizations
- Government agencies
- Health-care organizations
- Iowa residents
- Media
- Minority and under-served populations
- Payers and insurance providers
- Physicians and health-care providers
- Professional organizations
- Public health departments
- Public policy advocates
- Universities and researchers

Not sure where to start? Below are examples of actions Iowans can take to work toward the goals outlined in this plan:

**Hospitals or health-care organizations can**
- Acquire or maintain American College of Surgeons membership.
- Collaborate to sponsor community screening programs.
- Implement office-based reminders that identify patients due for cancer prevention and screening services.
- Offer clinical cancer research efforts across the state.
- Provide a meeting space for cancer support groups.

**Health-care providers can**
- Enroll patients in clinical trials.
- Learn about clinical cancer research studies available to patients.
- Make earlier referrals to hospice for end-of-life care.
- Provide cancer patients with a written summary of their care plan.
- Recommend appropriate cancer screening tests.
- Refer patients to smoking-cessation services and nutrition programs.
- Routinely ask patients about healthy lifestyle factors including tobacco use, physical activity, diet, and in-home radon testing.

**Local health departments can**
- Provide access to low-cost radon test kits and cancer screenings.
- Provide cancer awareness education to Iowans.
- Support community wellness campaigns.

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Community-based organizations can

- Collaborate to provide community prevention programs.
- Create a local action plan to reduce barriers to cancer screenings.
- Provide cancer awareness information to Iowans.
- Provide community-based educational forums to address the specific and unique needs of cancer survivors.

Professional organizations can

- Inform professional members of the importance and benefits of providing cancer clinical trials.
- Provide education to members on survivor needs and best practices.
- Support policy changes and increased funding for survivorship services.

Businesses and employers can

- Encourage employees to increase physical activity.
- Encourage workplace participation in the Live Healthy Iowa program.
- Provide full financial coverage for recommended cancer screenings, and time off for employees to get screened.
- Provide healthy foods and beverages in vending machines and cafeterias.
- Provide information to cancer survivors and their co-workers about issues faced as survivors return to work.
- Provide protective clothing to employees applying fertilizers, pesticides, and insecticides.
- Provide sun-protective gear to individuals working outside.

Schools and universities can

- Include cancer prevention messages in health classes.
- Increase physical education requirements.
- Make campuses tobacco-free environments.
- Open facilities for walking in bad weather.
- Provide healthy foods and beverages in vending machines and cafeterias.
- Provide information to cancer survivors and schools about issues faced as survivors return to school.

Survivors can

- Consider joining an advocacy group or organization working to improve survivors’ experiences.
- Mentor other survivors.
- Share personal experiences to help educate the public about the needs of survivors.

Legislators can

- Appropriate funding for comprehensive cancer control.
- Ensure that all Iowans have access to health care and to cancer screening services.
- Raise constituents' awareness about cancer prevention and control programs and help establish new programs where needed.
- Sponsor or support legislation that promotes cancer prevention and control.
- Support cancer research efforts across the state.
- Support full funding of all cancer prevention programs.
- Support or establish a cancer caucus in the Iowa General Assembly to provide the most up-to-date cancer information to all members of the legislature.

All Iowans can

- Ask organizations in your community what they are doing to support the Iowa Cancer Plan.
- Eat more fruits and vegetables, and maintain a healthy weight.
- If diagnosed with cancer, consider enrolling in a clinical trial.
- Increase daily physical activity.
- Know when to be screened and do it on a schedule.
- Show support and care for those who are diagnosed with cancer.
- Stop smoking or never start.
- Support cancer control legislation.
- Test homes for radon.
- Volunteer with organizations that support those living with cancer.
- Wear protective clothing when applying fertilizers, pesticides, and insecticides.
- Wear sunscreen, seek shade, and wear protective eye wear and clothing when outdoors.

Another simple, yet effective, way to fight cancer in Iowa is to become a member of the Iowa Cancer Consortium. Membership information and benefits can be found at www.CancerIowa.org.

Whatever action you choose to take, the most important thing is that you do take action. The Iowa Cancer Consortium, its members, and partners hope that you find inspiration and motivation within the pages of this plan. Working together, we can conquer cancer.
“We fixed the house while fixing me.”
"I taught special education and reading in Iowa for 33 years and was happily enjoying my second year of retirement: gardening, golfing, cooking, quilting, and tutoring an adult learner. Then, last spring I had what I thought were new seasonal allergy symptoms: an occasional wheeze and cough. When the wheeze was there with every breath, I finally went to see my family physician. He sent me for an x-ray, which immediately led to a CT scan. I soon met with a pulmonologist, and after more testing, he confirmed that I had non-small cell adenocarcinoma. My husband and I got the news the day before my 57th birthday.

I saw my surgeon that same day. He told me that many family physicians treat my kind of symptoms as asthma for eight to twelve months. By then, it’s usually too late to do surgery. I thank God every day for my family physician!

On May 17th, a surgeon removed my entire left lung. The pathology report came back stage 1B. There was no cancer in the ten lymph nodes that were removed. What an amazing outcome!

I have a lot of cancer in my immediate family. My sister Amy died of breast cancer in 1990 at the age of 34. Four years later, my dad died from leiomyosarcoma. And, in 2000 my youngest brother was diagnosed with colon cancer at age 36 (he is now cancer-free and doing well!). Since I expected some kind of cancer might be in my future, I wasn’t surprised when I needed a breast biopsy in January, but a few months later when the pulmonologist told me that I had lung cancer, I couldn’t really comprehend it. I have never smoked a cigarette in my life.

About a week after surgery, it dawned on me that I had only one healthy lung. How could I keep it healthy if I had no idea how I ever got lung cancer?

A few weeks later, I read the current issue of Bottom Line Health. In it was a short article titled ‘Nonsmokers and Lung Cancer.’ The article was all about radon. RADON! Somehow we had never heard of radon. Iowa has the highest incidence of radon in the entire country - seven out of ten homes have levels that are too high!

When we tested our house, the report said our radon level was 6.9 - too high to be safe. We have lived in this house for eighteen years, and our family room is in the lower level, so you can imagine how much exposure I had over the years.

At about the same time I started chemotherapy, we found a terrific person to fix our home to reduce its radon level. We fixed the house while fixing me. Now I feel safe and confident that my one healthy lung will continue to be healthy.

Looking back, I found it interesting that not one of the six doctors who were aware of my situation ever mentioned radon. I had to find out for myself. In fact, one of my doctors insisted that, “the only people who get lung cancer from radon are uranium miners.” Before I left his office, I simply said that I hoped no one he loved ever had to go through what I did. We’ve continued to talk, and I recently told him that I believed he was very wrong. He said he was willing to learn, and we’ve already met once to discuss it. He’s keeping an open mind; just another teaching challenge for me!

My family doctor tested his home soon after I explained to him that I believed my cancer was radon-induced. His results came back the same as mine. We happened to be out in his waiting room when he was sharing this with me. A lady on the other side of the room overheard our conversation, tested her home, and ended up with a result much higher than ours!

My doctor was almost beside himself; he couldn’t understand why physicians don’t know about this. I told him not to beat himself up, that five other doctors didn’t know either.

Most people with lung cancer do not get the prognosis I did. Most people die. I am convinced that I am supposed to accept this as my next teaching assignment. It has three parts: 1. increase the public’s awareness for the need to test their homes; 2. educate physicians and convince them that patients’ knowledge of their home radon level is part of their medical history; and 3. convince our legislators that there need to be laws in place to protect their constituents.

These days I am doing my best to find balance in my life. My new ‘teaching assignment’ now plays an important part. I tell my story as often as possible. This winter I joined a new group called the Iowa Radon Coalition. There are many terrific people in this group, including Dr. Bill Field, a national expert on radon. We have a three-year goal to get comprehensive radon legislation passed for our state. I also hope to convince our local medical school that patients should know the level of radon in their homes, just as they should know their blood pressure or cholesterol levels.

There is still a lot of teaching to do. So many times the task seems daunting, but my healthy lung and I are ready for the challenge."

Gail Orcutt, Pleasant Hill
Goal 1: Whenever Possible, Prevent Cancer from Occurring

Doctors often cannot explain why one person develops cancer and another does not. While risk factors like family history or age cannot be avoided, the National Cancer Institute estimates that 50% to 75% of cancer deaths are caused by human behaviors. Simple behavioral changes can prevent or lower the risk for certain types of cancers.

Life-saving cancer prevention efforts must take place on many levels. For example,

- Individuals must be motivated and have the ability to make lifestyle changes such as increasing physical activity and following healthy eating patterns.
- Policies must reflect the health priorities of communities, such as requiring radon testing and mitigation in rental homes.
- Wellness and prevention services, such as evidence-based tobacco cessation programs, must be funded.
- Iowans must be educated about preventative health measures, such as the HPV vaccine.

Individual action, policy change, funding, and education must all be addressed, encouraged, and supported for action to happen and deaths to be prevented.

If communities throughout Iowa complete even one action step listed within this goal, progress will be made toward preventing the 50% to 75% of avoidable cancer deaths.

The Iowa Cancer Plan sets forth seven key cancer prevention priorities:

1. Advance evidence-based primary-prevention efforts by coordinating with programs and organizations that use primary-prevention techniques to reduce chronic disease.
2. Decrease tobacco use.
3. Improve physical activity and nutrition.
4. Follow nationally recognized guidelines to increase vaccination rates for all vaccines demonstrated to reduce the risk of cancer.
5. Increase protective behaviors from sun/ultraviolet exposure.
6. Decrease environmental exposures to radon and other substances linked to cancer.
7. Increase the number of individuals who receive a cancer risk assessment.

Priority I: Advance evidence-based primary-prevention efforts by coordinating with programs and organizations* that use primary-prevention techniques to reduce chronic disease.

*Includes programs and organizations focusing on tobacco, physical activity, nutrition, obesity, vaccinations, diabetes, and environmental health.

Strategy A: Build or sustain coalitions with key stakeholders to enhance cancer prevention activities.

Action Steps

1. Educate policy makers and key stakeholders on the chronic disease burden and evidence-based interventions for effective primary-prevention health policies.

2. Work with relevant partners to help implement effective primary-prevention policy, including
   - Human Papilloma Virus (HPV) and Hepatitis B Virus (HBV) vaccine policies
   - Policies related to evidence-based environmental health risks
   - Policies requiring daily quality physical education (PE), healthy foods in schools, and complete streets
   - Regulation related to the use of indoor tanning devices by children and adolescents
   - Restriction of tobacco sales
   - Tobacco-free policies

3. Use common risk factors among programs to identify and implement collaborative activities.

4. Coordinate with chronic-disease partners to ensure use of consistent prevention messages.

5. Work with partners to develop and implement a dissemination plan for prevention messages.

6. Coordinate with relevant research partners in the area of primary prevention.

7. Promote the translation of primary-prevention research into practice.


Primary Prevention
Measures taken to prevent disease or injury before they occur.

Complete Streets
Streets designed to enable safe access for all users. They may include bike lanes, sidewalks, bus lanes, frequent and safe crossing opportunities, and median islands.11

Whenever Possible, Prevent Cancer from Occurring

Secondhand Smoke
A mixture of two forms of smoke that come from burning tobacco: sidestream smoke and mainstream smoke. Sidestream smoke comes from the end of a lighted cigar, pipe, or cigarette. Mainstream smoke is exhaled by a smoker. 12

Smoke Free Air Act
In 2008, the Iowa legislature passed a law to protect employees and the general public from secondhand smoke. The act prohibits smoking in almost all public places, enclosed areas within places of employment, and some outdoor areas. For more information, visit http://www.iowasmokefreeair.gov/.

Priority I: Decrease tobacco use.

Strategy A: Decrease the prevalence of tobacco* use among young people.
*Includes products containing nicotine that are not FDA approved for cessation purposes.

Action Steps
1. Assess the extent and type of retail tobacco advertising and promotions at the local level.
2. Increase the proportion of public/private schools and school districts implementing 100% comprehensive tobacco-free policies.
3. Maintain or increase funding to the Division of Tobacco Use Prevention and Control at CDC recommended levels.
4. Explore increasing the tobacco tax.
5. Maintain compliance with the state and federal retail compliance laws.

This Strategy also aligns with: Centers for Disease Control and Prevention. (2007). Best practices for comprehensive tobacco control programs. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

Strategy B: Reduce exposure to secondhand smoke.

Action Steps
1. Assess multi-unit housing to determine how many are 100% smoke free.
2. Assist multi-unit housing entities with becoming 100% smoke free.
3. Eliminate the casino exemption in the Smoke Free Air Act.
4. Increase the number of establishments that do not receive a second notice for violating the Smoke Free Air Act.

This Strategy also aligns with: Centers for Disease Control and Prevention. (2007). Best practices for comprehensive tobacco control programs. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

Strategy C: Decrease smoking prevalence.

Action Steps

1. Increase the proportion of smokers who are aware of smoking-cessation services available to them.
2. Increase the number of insurance plans covering cessation services, Nicotine Replacement Therapy (NRT), and counseling.
3. Eliminate the sale of e-cigarettes in malls, drug stores, and pharmacies.
4. Increase the proportion of smokers advised to quit smoking by a health-care professional.
5. Increase the proportion of health-care organizations using provider-reminder systems.
6. Increase the proportion of health-care providers and organizations that have fully implemented the Public Health Services guidelines.
7. Increase the number of fax referrals to Quitline Iowa.

This Strategy also aligns with: Centers for Disease Control and Prevention. (2007). Best practices for comprehensive tobacco control programs. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

Smoking Cessation
Process of discontinuing the practice of smoking.

Nicotine Replacement Therapy (NRT)
The use of gums, patches, sprays, inhalers, or lozenges that contain nicotine, but do not contain other harmful chemicals in tobacco, to help smokers quit smoking. NRT can help relieve some withdrawal symptoms associated with efforts to quit smoking. 13

E-Cigarettes
Electrical devices that mimic the act of smoking tobacco and create an inhaled mist. Also known as electronic cigarettes, they are marketed as a smoking-cessation tool, but may have negative health effects.

Health Care Organizations
Including, but not limited to, health agencies, systems, and clinics.

Public Health Services Guidelines
The Public Health Service (PHS) created a Clinical Practice Guide- line for treating tobacco use and dependence. 14

Quitline Iowa
A statewide toll-free smoking-cessation hotline. For more information, call 1-800-QUIT-NOW (1-800-784-8669), or visit https://www.quitlineiowa.org/.

Whenever Possible, Prevent Cancer from Occurring

Iowans Fit for Life
A joint statewide initiative between the Iowa Department of Public Health and its partners that promotes increased opportunities for physical activity and healthy eating for Iowans of all ages. Ultimately, Iowans Fit for Life aims to improve the health of Iowans by reducing the risks and preventing disease related to inactivity and unhealthy eating behaviors. For more information, visit http://www.idph.state.ia.us/iowansfitforlife/.

Priority III: Improve physical activity and nutrition.

Strategy A: Increase the percentage of Iowans who participate in recommended amounts of physical activity.

Action Steps
1. Align physical activity strategies and actions with the Iowans Fit for Life State Plan goals, objectives, and strategies.
2. Increase the amount of physical activity in schools through physical education and classroom physical activity opportunities.
3. Strengthen physical education requirements in schools.
4. Enhance infrastructure to support walking and bicycling in communities.
5. Improve access to outdoor recreational facilities.
6. Enhance and encourage collaboration between physical activity social-support programs (e.g. Live Healthy Iowa).

Strategy B: Increase the percentage of Iowans who follow healthy eating patterns, including a diet rich in whole foods such as fruits, vegetables, and whole grains.

**Action Steps**

1. Align nutrition strategies and actions with the Iowans Fit for Life State Plan goals, objectives, and strategies.
2. Increase the availability of healthy food and beverage choices in public service venues and private sector businesses (e.g., grocery stores, schools, restaurants, and worksites).
3. Increase the use of multi-component interventions that support the increase of fruit and vegetable consumption.
4. Increase individual support for breast feeding.
5. Discourage consumption of sugar-sweetened beverages.
6. Discourage consumption of alcoholic beverages in excess of recommended levels.*

* The American Cancer Society15 and the American Institute for Cancer Research16 recommend no more than two alcoholic drinks per day for men and no more than one drink per day for women. Individuals should discuss their alcoholic intake with their health-care providers, as personal circumstances may affect whether these guidelines are appropriate for a particular individual.


Strategy C: Increase screening of and treatment for obesity.

**Action Steps**

1. Increase awareness of the connection between cancer risk/prevention and nutrition, physical activity, and obesity at all ages.
2. Support third-party reimbursement for primary care treatment of overweight/obesity from medical providers, registered dietitians, and other qualified health-care providers.

Whenever Possible, Prevent Cancer from Occurring

Human Papillomavirus (HPV)
The most common sexually transmitted infection (STI). There are more than 40 types of HPV that can infect the genital areas, mouths, and throats of males and females.17

Uninsured
Not covered by health insurance.

Underinsured
Having inadequate health insurance coverage.

Vaccine for Children Program
A federally funded program that provides vaccines at no cost to children who may not otherwise be vaccinated because of inability to pay. For more information, visit http://www.cdc.gov/vaccines/programs/vfc/default.htm.

Immunization Registry Information System (IRIS)
A computerized tracking program that documents the immunizations for children, adolescents, and adults who are seen in a number of public and private health-care provider sites throughout the state. For more information, visit http://www.idph.state.ia.us/ImmTB/Immunization.aspx?prog=Imm&pg=Iris.

Priority IV: Follow nationally recognized guidelines to increase vaccination rates for all vaccines demonstrated to reduce the risk of cancer.

Strategy A: Increase community awareness of the human papillomavirus (HPV) vaccine.

Action Steps
1. Educate parents, community members, and health-care providers about the HPV vaccine.
2. Support public awareness campaigns targeted at parents, school-age females, and populations most at risk for HPV infection and cervical cancer development.
3. Partner with local organizations to increase outreach and education efforts targeting community awareness of the HPV vaccine benefits.


Strategy B: Increase access to the HPV vaccination series among populations recommended by the Centers for Disease Control and Prevention.

Action Steps
1. Educate uninsured and underinsured populations on financial assistance programs available for the HPV vaccine.
2. Support and appropriately track Iowa’s Vaccine for Children Program to increase the number of health-care providers who participate and administer the HPV vaccine.
3. Advocate for insurance coverage of the HPV vaccine according to Centers for Disease Control and Prevention recommendations.

Strategy C: Implement health-care system strategies to increase vaccination rates and vaccination series completion rates.

Action Steps
1. Educate providers about recommendations on and benefits of the HPV vaccine.
2. Support and collaborate with the Iowa Department of Public Health’s Immunization Registry Information System (IRIS) to increase reporting of HPV vaccine administration.
3. Implement office-based reminder systems to increase the number of patients who complete the HPV vaccination series.
4. Support school-based clinics that offer the HPV vaccine series.

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Priority V: Increase protective behaviors from sun/ultraviolet exposure.*

**Strategy A:** Increase educational and policy approaches related to sun/UV protective behaviors in outdoor settings.

**Action Steps**

1. Increase targeted skin-cancer education for Iowans working outdoors.
2. Increase targeted skin-cancer education for child-care providers, public/private school personnel, and parents.
3. Establish sun-safety and tanning education in public and private school health curricula.
4. Promote policies that advance sun/ultraviolet ray safety measures such as the use of sunglasses, hats, sun shades, trees, and/or other protective means.


**Strategy B:** Decrease the use of tanning beds.

**Action Steps**

1. Provide public education about the harm of exposure to ultraviolet rays from tanning beds.
2. Advance policy that minimizes, if not eliminates, the use of tanning beds.

*A small amount of solar ultraviolet ray exposure is necessary for the production of vitamin D, which is essential for bone health. There are two other ways to obtain vitamin D: dietary sources (particularly fortified milk and some cereals, oily fish, and eggs) and supplementation. The current national recommended daily intake of vitamin D is 200 International Units (IU) to 600 International Units (IU). Research is in progress to improve the understanding of vitamin D levels and its health effects, including development of some cancers. More information about vitamin D and health is available online at http://www.cancer.org/docroot/ETO/content/ETO_5_3X_Vitamin_D.asp?sitearea=ETO.*

Whenever Possible, Prevent Cancer from Occurring

Radon
A radioactive gas found in outdoor and indoor air at various concentrations. It is the second leading cause of lung cancer after smoking and the number-one leading cause of lung cancer among non-smokers.19

2000 International Residential Building Code
Created by The International Code Council to set standards and codes used to construct residential and commercial buildings. Outlines radon mitigation standards, primarily for new building construction. For more information, visit http://www.iccsafe.org/Pages/default.aspx.

Radon Mitigation
Radon mitigation is any process or action that is done to reduce radon concentrations in a building.

Priority VI: Decrease environmental exposures to radon and other substances linked to cancer.

Strategy A: Decrease exposure to radon.
Action Steps
1. Educate the public about radon and its link to lung cancer.
2. Advocate for and support comprehensive legislation requiring newly constructed homes and buildings to be built according to radon control methods in the 2000 International Residential Building Code.
3. Encourage homeowners and home buyers to hire certified radon-measurement specialists to test all buildings for radon before they are sold and at the time of sale.
4. Advocate for and support comprehensive policies that require radon testing and mitigation for rental homes.
5. Support financial assistance and incentives for radon mitigation.


Strategy B: Decrease environmental exposures to other substances linked to cancer, and conduct research to increase the evidence base.
Action Steps
1. Assess health and environmental data to identify information gaps.
2. Encourage environmental cancer risk research and funding.
3. Enhance collaboration among state and local public health departments, the academic community, and community organizations to further research and prevention efforts.
4. Develop and disseminate public-health messages to raise awareness of environmental cancer risks that are based on evidence, and outline specific steps individuals can take to reduce or eliminate exposures.

Priority VII: Increase the number of Iowans who receive a cancer risk assessment.

Strategy A: Increase access to cancer risk assessments.

Action Steps
1. Advocate for health insurance coverage of cancer risk assessment and genetic testing.

Strategy B: Educate providers and consumers about assessing cancer risk.

Action Steps
1. Educate providers about the implications of family history in cancer risk and about the benefits of cancer risk assessment and genetic counseling.
2. Create an awareness campaign highlighting the importance of family history as a cancer risk factor.
3. Provide culturally appropriate risk assessment materials to healthcare providers and patients.


Strategy C: Increase the number of qualified professionals who offer cancer risk assessments.

Action Steps
1. Advocate for the licensing of genetic counselors.
2. Partner with other professions, such as nurse educators, to provide cancer risk assessments and counseling.
3. Integrate genetic counseling into the patient teams at oncology clinics.
4. Promote Genetic Clinical Nursing (GCN) credentialing for nurses.
5. Advocate for an increased focus on genetic education during nursing training and academia.

Cancer Risk Assessment
“The quantitative or qualitative assessment of an individual’s risk of carrying a certain gene mutation, or developing a particular disorder, or of having a child with a certain disorder; sometimes done by using mathematical or statistical models incorporating such factors as personal health history, family medical history and ethnic background.”

Genetic Counseling
“A communication process that seeks to assist affected or at-risk individuals and families in understanding the natural history, disease risks, and mode of transmission of a genetic disorder; to facilitate informed consent for genetic testing when appropriate; to discuss options for risk management and family planning; and to provide for or refer individuals for psychosocial support as needed.”

Genetic Clinical Nurses (GCNs)
Registered nurses who have special education and training in the field of genetics.

Targets for Change

→ **Decrease tobacco use among adults.**

2010 Baseline: 16.1%

2017 Goal: 14.5%

Percent of Current Smokers, All Races, Both Sexes, Ages 18+

10% Improvement


This Target also aligns with: Healthy People 2020, TU-1.1

→ **Decrease tobacco use among youth.**

2008 Baseline: 27%

2017 Goal: 24.3%

Percentage of high school students who smoked cigarettes or cigars, or used chewing tobacco, snuff, or dip on one or more of the past 30 days.

10% Improvement


This Target also aligns with: Healthy People 2020, TU-2.1

→ **Decrease youth tobacco initiation.**

2008 Baseline: 41.8%

2017 Goal: 37.6%

Percentage of high school students who have ever tried cigarette smoking, even one or two puffs.

10% Improvement


This Target also aligns with: Healthy People 2010, TU 3.1. HP2020 defined initiation as “who had not previously used tobacco products in their lifetime first used tobacco products in the past 12 months”.

→ **Increase adult cessation attempts.**

2010 Baseline: 52.6%

2017 Goal: 57.9%

Percent of Current Smokers Trying to Quit for a Day or More, All Races, Both Sexes, Ages 18+

10% Improvement


This Target also aligns with: Healthy People 2020, TU – 4.1

→ **Increase youth cessation attempts.**

2007 Baseline: 57.0%

2017 Goal: 62.7%

Of high school students who were current smokers, the percentage who tried to quit smoking during the past 12 months.

10% Improvement


This Target also aligns with: Healthy People 2010, TU-7
### Increase the proportion of Iowans reporting no hours of exposure to secondhand smoke.

<table>
<thead>
<tr>
<th>2010 Baseline: 87.0%</th>
<th>2017 Goal: 95.7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a typical week at work, how many hours would you say that you are in a room or car with smoke from someone else’s cigarettes, cigars, or pipe?</td>
<td>10% Improvement</td>
</tr>
<tr>
<td>This Target also aligns with: Healthy People 2020, TU 11.1, 11.2, 11.3</td>
<td></td>
</tr>
</tbody>
</table>

### Increase the proportion of Iowans who allow no smoking inside their home.

<table>
<thead>
<tr>
<th>2010 Baseline: 79.2%</th>
<th>2017 Goal: 87.1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which statement best describes the rules about smoking inside your home? 1. Smoking is not allowed anywhere inside your home.</td>
<td>10% Improvement</td>
</tr>
</tbody>
</table>

### Increase the number of current smokers who are screened for tobacco-use by provider in last 12 months.

<table>
<thead>
<tr>
<th>2008 Baseline: 90%</th>
<th>2017 Goal: 99%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of current cigarette smokers, 90% were asked by a health provider if they smoked and 68% were advised to quit.</td>
<td>10% Improvement</td>
</tr>
<tr>
<td>This Target also aligns with: Healthy People 2020, TU 9.1, TU 9.2 (69.1% Office-based Ambulatory Care Settings; 66.3% Hospital Ambulatory Care Settings) (10% improvement for both)</td>
<td></td>
</tr>
</tbody>
</table>

### Decrease proportion of adults who are overweight or obese.

<table>
<thead>
<tr>
<th>2010 Baseline: 66.2%</th>
<th>2017 Goal: 59.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight or obese Iowans (body mass index greater than or equal to 25.0 kg/m2), All Races, Both Sexes, Ages 18+</td>
<td>10% Improvement</td>
</tr>
<tr>
<td>This Target also aligns with: Healthy People 2020, NWS-9.</td>
<td></td>
</tr>
</tbody>
</table>

### Decrease proportion of adults who are obese.

<table>
<thead>
<tr>
<th>2010 Baseline: 29.1%</th>
<th>2017 Goal: 26.2%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obese (body mass index greater than or equal to 30.0 kg/m2), All Races, Both Sexes, Ages 18+</td>
<td>10% Improvement</td>
</tr>
<tr>
<td>This Target also aligns with: Healthy People 2020, NWS-9.</td>
<td></td>
</tr>
<tr>
<td>Target Description</td>
<td>2009 Baseline</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Increase proportion of adults getting recommended levels of physical activity.</td>
<td>49.7%</td>
</tr>
<tr>
<td>Iowa’s Getting Recommended Level of Physical Activity, All Races, Both Sexes, Ages 18+</td>
<td></td>
</tr>
<tr>
<td>Recommended physical activity was defined as either regular physical activity 30 or more minutes per day for 5 or more days per week or vigorous activity 20 or more minutes per day for 3 or more days per week.</td>
<td></td>
</tr>
<tr>
<td>This Target also aligns with: Healthy People 2020 PA-2.2. HP202 had slightly different physical activity suggestions (moderate intensity 150 minutes/week or vigorous intensity 75 minutes/week).</td>
<td></td>
</tr>
<tr>
<td>Increase level of reported physical activity among youth.</td>
<td>49.9%</td>
</tr>
<tr>
<td>Percentage of students who were physically active for a total of 60 minutes or more per day on five or more of the past seven days.</td>
<td></td>
</tr>
<tr>
<td>This Target also aligns with: Healthy People 2020, PA-3.</td>
<td></td>
</tr>
<tr>
<td>Increase level of reported fruit and vegetable consumption among adults.</td>
<td>18.5%</td>
</tr>
<tr>
<td>Percentage of Iowans Who Consumed Five or More Fruits/Vegetables per Day, All Races, Both Sexes, Ages 18+</td>
<td></td>
</tr>
<tr>
<td>This Target also aligns with: Healthy People 2020 NWS-14 and NWS-15. HP202 had different measures. (0.9 cup equivalents of fruit per 1,000 calories and 1.1 cup equivalents per 1,000 calories for vegetables for everyone aged and older)</td>
<td></td>
</tr>
<tr>
<td>Increase level of reported fruit and vegetable consumption among youth.</td>
<td>18.9%</td>
</tr>
<tr>
<td>Percentage of students who ate five or more servings of fruits and vegetables per day during the past 7 days</td>
<td></td>
</tr>
<tr>
<td>This Target also aligns with: Healthy People 2020 NWS-14 and NWS-15 (0.9 cup equivalents of fruit per 1,000 calories and 1.1 cup equivalents per 1,000 calories for vegetables for everyone aged and older)</td>
<td></td>
</tr>
<tr>
<td>Increase routine vaccination coverage levels for adolescents.</td>
<td>22%</td>
</tr>
<tr>
<td>Percentage of boys and girls aged 13-15 in the IRIS system that have up-to-date 3-1-2-1-2 coverage.</td>
<td></td>
</tr>
<tr>
<td>This Target also aligns with: Healthy People 2020, IID-11.</td>
<td></td>
</tr>
<tr>
<td>Overarching Issues: Collaboration</td>
<td>Disparities</td>
</tr>
<tr>
<td>----------------------------------</td>
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</tbody>
</table>

### Increase the number of Iowans vaccinated against HPV.

2010 Baseline: 26% (Girls 13-15 years old)*

<table>
<thead>
<tr>
<th>2017 Goal: 28.6% (girls 13-15 years old).</th>
</tr>
</thead>
</table>

Percentage of girls aged 13-15 in the IRIS system who have received all 3 HPV vaccine doses.


This Target also aligns with: Healthy People 2020, IID-11.4

*The numbers represented in IRIS are only as good as the reporting practices. It is NOT required that all clinics report HPV administration to the IRIS database, therefore numbers only reflect those who did report.

### Decrease the age-adjusted incidence per 100,000 of all cancers.

2006-2008 Baseline: 475.1 males and females

<table>
<thead>
<tr>
<th>2017 Goal: 465.6</th>
</tr>
</thead>
</table>

547.4 males  
426.2 females  
469.9 whites  
543.8 blacks  
314.7 Other

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4)

20% of 10% improvement target for overall cancer death rate

### Decrease the age-adjusted incidence per 100,000 for lung cancer.

2006-2008 Baseline: 68.5

<table>
<thead>
<tr>
<th>2017 Goal: 63.7</th>
</tr>
</thead>
</table>

86.2 males  
55.8 females  
68.1 whites  
109.9 blacks  
51.1 Other

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4)

70% of 10% improvement target for overall lung cancer death rate

### Decrease the age-adjusted incidence per 100,000 for oral cavity and pharyngeal cancer.

2006-2008 Baseline: 11.2

<table>
<thead>
<tr>
<th>2017 Goal: 10.9</th>
</tr>
</thead>
</table>

17.0 males  
6.2 females  
11.0 whites  
13.8 blacks  
7.1 other

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4)

25% of 10% improvement target for overall oral cavity and pharyngeal cancer death rate

### Decrease the age-adjusted incidence per 100,000 for skin melanoma.

2006-2008 Baseline: 20.7

<table>
<thead>
<tr>
<th>2017 Goal: 19.7</th>
</tr>
</thead>
</table>

24.7 males  
18.4 females  
20.3 whites  
blacks: not available  
Other: not available

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4)

50% of 10% improvement target for melanoma cancer death rate
“You think having a colonoscopy is hard? Nothing compares to having to tell your family you have cancer.”
LouAnnda Larson didn’t plan to get a colonoscopy. She certainly had no symptoms of colon cancer. Nevertheless, her doctor asked her to do a fecal occult blood test as part of a physical exam associated with her diabetes care. The results showed blood in her stool.

LouAnnda, a fireball at age 55, agreed easily to the colonoscopy. “So, I had blood in my stool. I went and I did the procedure. It wasn’t that big of a deal. Wanted a cheeseburger. Had to watch my husband eat a cheeseburger. Got a cheeseburger afterwards.”

When her colonoscopy showed only one polyp, LouAnnda took that as a positive sign. “I told my whole family, ‘Hey! You know what? I only had one polyp!’ I was so happy!”

A week later, a phone call gave her news she wasn’t ready for – the polyp was cancerous.

“You think having a colonoscopy is hard? Nothing compares to having to tell your family that you have cancer. My husband came home that night and I had to sit him down and say, ‘Your wife has cancer.’ And he cried. I had to watch my grandchildren cry.”

Luckily for LouAnnda, further tests showed that when the cancerous polyp was removed during her colonoscopy, all traces of cancer went with it. But the simple procedure that saved her life is never far from LouAnnda’s thoughts.

“Would you rather go get a test, or would you rather tell your kids, husband, and grandkids that you have cancer? Your choice. Some things are necessary; a colonoscopy is one of them.”
Goal 2: If Cancer Does Occur, Find It In Its Earliest Stages

As many as six of every ten deaths from colon cancer could be prevented if every adult age 50 years and older was tested regularly.

This goal addresses the early detection of an existing cancer or pre-cancer. The priorities, strategies, and action steps presented relate to breast cancer, cervical cancer, and colorectal cancer – three cancers for which screening has significantly reduced mortality.

An important goal for cancer control is to find the disease in the earliest stages when treatment is most effective. Early detection through screening tests can increase survival rates and reduce treatment complications.

Fortunately, screening tests for several cancers are effective in detecting early-stage or pre-cancerous disease. Women between ages 50 and 74 years, for example, are recommended to have mammograms at least every other year. Research shows that regular mammograms can reduce the number of deaths from breast cancer. Similarly, Pap tests have led to a dramatic decrease in death from cervical cancer since the test was introduced in the 1950s. Mortality rates from colorectal cancer have also been reduced by early detection. Additional data from the Centers for Disease Control and Prevention states that as many as six of every ten deaths from colon cancer could be prevented if every adult age 50 years and older was tested regularly.

Some screening tests can detect pre-cancerous growths, which allows treatment to begin before cancer occurs. Colonoscopies, for example, can detect polyps in the colon that have the potential to become cancerous. These polyps are often removed during the colonoscopy, thus preventing cancer altogether. Similarly, the Pap test can detect pre-cancerous cells in the cervix. If pre-cancer is found, it can be treated, stopping cervical cancer before it starts.

The Iowa Cancer Registry’s 2011 report describes the declining mortality from colorectal cancer. This decline is partly explained by increasing use of colonoscopies. There remains plenty of room for improvement; more than a third of Iowa men and women have never had a colonoscopy. Other colorectal screening tests, such as fecal occult blood tests, are also underused. Over 20% of Iowa women ages 50 years and older have not received a mammogram in the past two years, and 16% of women have not had a Pap test within the past three years. Increasing the use of screening tests is an important part of the fight against cancer.

To do this, action is needed to provide Iowans with prompt access to information, resources, and services. Improvements must be made in health-care systems across Iowa. Over the next five years, the potential to improve cancer screening rates can become a reality if there are: 1. increases in public knowledge of cancer risk factors that affect the need and timing of screening; 2. improved access to quality recommended cancer screenings; and 3. implemen-

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Fecal Occult Blood Test (FOBT)
A test that detects hidden blood within a stool sample, which may indicate colorectal cancer.

tation of health-care system strategies. Iowans need to be aware of the cancer screening options and guidelines not only for breast, cervical, and colorectal cancer, but for all cancers so individuals will be empowered to take action to protect their health. Therefore, multiple communication methods need to be used to educate the public on recommended cancer screenings and encourage people to get screened. Additionally, making culturally appropriate tools and materials available can lead to an increase of cancer screening knowledge among diverse populations.

Even if Iowans are aware of the value of cancer screenings, it does not mean they have access to screening services. Implementing evidence-based strategies to decrease financial, geographic, and community-level barriers can increase the number of people who are screened for cancer. Addressing structural barriers, such as modifying health clinic service hours or offering screening services in non-traditional settings can help overcome obstacles that make it difficult for people to obtain cancer screenings.

Efforts to improve early cancer detection can be enhanced by implementing strategies that take a comprehensive health-systems approach to increase screening rates. Through such an approach, multiple evidence-based interventions are directed toward patients, providers, employers, and health plans. These interventions will help ensure that cancers are found as early as possible.

The Iowa Cancer Plan sets forth three key priorities to help find cancer in its earliest stages:

1. Encourage the public to follow screening recommendations.
2. Increase access to quality recommended cancer screenings.
3. Implement health-care systems-based strategies to increase cancer screening rates.
Priority I: Encourage the public to follow screening recommendations.

Strategy A: Use multiple communication methods to educate the public on recommended cancer screenings.

**Action Steps**
1. Increase key stakeholders’ and community partners’ awareness of screening sites.
2. Increase knowledge of risk factors that affect the need for cancer screenings.
3. Provide culturally competent and disease-specific educational materials in multiple languages to targeted communities.
4. Promote and encourage individual responsibility for cancer screenings.


Strategy B: Use multiple communication methods to encourage individuals to get screened.

**Action Steps**
1. Increase public knowledge about cancer prevention, screening facts, and guidelines.
2. Partner with workplaces to educate and encourage screenings.
3. Link with state and local chronic-disease partners who have health-awareness media campaigns and websites to promote cancer screening opportunities.
4. Use social media outlets to provide cancer screening education and promote cancer screening events and programs.


The Community Guide recommends small media as an effective intervention for increasing breast, cervical colorectal cancer screening. It also recommends one-on-one education for breast and cervical cancer screening and group education for breast cancer screening.*
Overarching Issues: ✔ Collaboration | ✔ Disparities | ✔ Workforce | ✔ Policy & Systems | ✔ Research | ✔ Evaluation

Priority II: Increase access to quality recommended cancer screenings.

Strategy A: Decrease financial barriers to cancer screenings.

Action Steps
1. Increase awareness related to personal health-care coverage for recommended cancer screenings.
2. Educate uninsured and underinsured Iowans about available early-detection cancer screenings provided at little or no cost.
3. Educate and encourage health insurance companies to provide full cancer screening coverage.
4. Increase the number of employers that provide full-coverage health insurance plans for cancer screenings.
5. Increase the medical community's awareness of cancer screening resources.
6. Advocate for programs that provide cancer screenings at little or no cost.
7. Advocate for increasing early-detection cancer screening resources at entities that provide services at little or no cost to the service recipient.


The Community Guide recommends reducing structural barriers for increasing breast and colorectal cancer screening. It also recommends reducing financial barriers for increasing breast cancer screening.

Strategy B: Decrease geographic barriers to cancer screenings.

Action Steps
1. Increase public awareness of transportation resources through multiple culturally appropriate venues.
2. Identify transportation policies and/or regulations that restrict or create barriers to accessing quality cancer care.


The Community Guide recommends reducing structural barriers for increasing breast and colorectal cancer screening. It also recommends reducing financial barriers for increasing breast cancer screening.
**Strategy C:** Work with community groups to research and identify other barriers to cancer screenings.

**Action Steps**
1. Work with Iowa communities to identify unrecognized barriers to screening.
2. Support initiatives directed at identifying unrecognized barriers to screening.
3. Encourage and support organizations that provide patient navigation, case management, and community-health-worker services that address barriers to cancer screening to increase the number of people who are screened.


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**Priority III:** Implement health-care system-based strategies to increase cancer screening rates.

**Strategy A:** Increase delivery of education about recommended cancer screenings from health-care providers to their patient populations.

**Action Steps**
1. Offer training and tools to providers regarding how to educate patients about recommended screenings and their value.
2. Identify cultural and population-based issues that decrease screening rates.
3. Encourage providers to discuss risk factors that affect routine screening recommendations (e.g. family history and genetics) with patients.
4. Encourage providers to conduct a cancer-related check up in a patient’s periodic health examination, including an assessment of tobacco use.


The Community Guide recommends provider assessment and feedback as an effective provider-oriented intervention for increasing breast, cervical and colorectal cancer screening.
**Strategy B**: Increase the use of office-based systems that inform patients of screening options and facilitate patient compliance.

**Action Steps**

1. Create an office environment where all staff are involved with ensuring that patients receive recommended screenings.
2. Implement provider reminder systems that identify patients due for cancer screenings.
3. Use client reminder tools to inform patients they are due for cancer screenings.
4. Provide administrative services that facilitate patient compliance (e.g., scheduling assistance and translation services, and flexible hours of service).


The Community Guide recommends provider reminder and recall systems and client reminders as effective interventions for increasing breast, cervical and colorectal cancer screening.

**Strategy C**: Encourage health plans to educate members, employers, and providers on recommended cancer screenings.

**Action Steps**

1. Provide information on the value of early detection to members, employers, and providers.
2. Use client reminder tools to inform health-plan members who are due for recommended cancer screenings.
3. Inform employers on the importance of providing full coverage for recommended cancer screenings in their health plans and encouraging employees to be screened.
4. Educate employers about the role incentives play in getting their employees to obtain recommended cancer screenings.

Reduce the age-adjusted incidence per 100,000 for late-stage female breast cancer.

2006-2008 Baseline: 42.3
- 42.4 whites
- 46.3 AA
- 15.6 other

2017 Goal: 40.2

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4 – summary stage 2000)

This Target also aligns with: Healthy People 2020, C-11

Reduce the age-adjusted incidence per 100,000 for invasive colorectal cancer.

2006-2008 Baseline: 52.2
- 59.2 males
- 49.2 females
- 52.0 whites
- 63.9 AA
- 35.0 other

2017 Goal: 44.4

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4 – summary stage 2000)

This Target also aligns with: Healthy People 2020, C-9

Decrease the age-adjusted incidence per 100,000 for invasive cervical cancer.

2006-2008 Baseline: 6.9
- 6.6 whites
- 16.4 AA
- Other: not available

2017 Goal: 6.2

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4)

This Target also aligns with: Healthy People 2020, C-10

Increase the percent of women between 50 and 74 years of age who have had a mammogram in the past two years.

2010 Baseline: 80.4%

2017 Goal: 88.4%


This Target also aligns with: Healthy People 2020, C-17

Increase the percent of people age 50-75 years of age who had a colorectal screening test.

2010 Baseline: 63.4%

2017 Goal: 69.7%

Proportion of people 50-75 years of age with stool test in past year OR colonoscopy within past 10 years OR sigmoidoscopy within past 5 years.


This Target also aligns with: Healthy People 2020, C-16
Increase the percent of women age 21 years and older who had a Pap test within past three years.

2010 Baseline: 83.9%
2017 Goal: 92.3%

Proportion of women 21 years of age and older who have had a Pap test in past three years.


*This Target also aligns with: Healthy People 2020, C-15*
“I am winning the fight of my life!”

“I was 30 years old, living in Hawaii with no health issues, when I was diagnosed with cancer,” says Greg. “I was strong and in good mental and physical condition.”

On October 28, 2004, Greg’s plane had just landed in Minneapolis, where he was ready to start his new job with Northwest Airlines. “I checked into my hotel, went out to eat and went to bed for what I thought would be a good night’s sleep,” he says.

His night turned out to be anything but good. At 11:15 p.m. Greg experienced a grand mal seizure. “I couldn’t talk, was barely able to breathe, and was conscious but very confused.” A CT scan and MRI followed, and eventually a neurologist gave him the news – he had a brain tumor.

Greg’s tumor turned out to be a stage-four Glioblastoma. “I could tell in the neurologist’s eyes and tone of voice that the chances I would survive were extremely slim. I thought to myself, ‘Did I hear him right? I have a brain tumor? Why me?’”

At the time, Greg had a one-year-old son. He desperately wanted to be there for his son’s first day of school, his graduation, his wedding, and other big moments of his life. It was then that Greg says he “buckled down for the fight of my life.”

Greg’s oncologist gave him three options for treatment, ranging from minimally invasive to a third option that would most likely make him the sickest, but leave him with the best chance of long-term survival. Greg choose to, “go all out to fight” his cancer.

For the next twelve months, Greg underwent surgery and grueling chemotherapy treatments. When his regimens were over, Greg went into “watch-and-see status.”

“Textbooks and statistics showed a 100% chance the tumor would grow back,” he says. “Thank God, to this day, it hasn’t.”

Greg credits his recovery to the aggressive treatment his neurosurgeon offered him, as well as his own positive attitude and physical health.

Whatever caused his amazing recovery, Greg will not soon forget the battle he won.

“I got remarried in June of 2009 to a wonderful woman who has first-hand experience dealing with a terminal illness. She herself has Cystic Fibrosis, has had a liver transplant, has diabetes and is on the kidney transplant list. We have a unique bond and take care of each other in addition to taking care of my almost 8-year-old son.

“I have dedicated my life to helping and educating those going through cancer or caring for someone going through cancer. There is so much that a person like myself can do to help.

“This is my story, and I am winning the fight of my life!”

Greg Cantwell, Iowa City
Goal 3: Improve the Accessibility, Availability, and Quality of Cancer Treatment Services and Programs.

When cancer is found, a patient’s survival and quality of life can depend on the availability of timely, quality treatment. However, an estimated 1 in 10 Iowans are living without health insurance, which may eliminate cancer treatment as an option.\(^{29}\) Complicating matters further, Iowa is a largely rural state (with an estimated 52 persons per square mile), making it difficult to travel to receive cancer treatment.\(^{30}\) Other barriers, including those based on culture, language, age, or socioeconomic status, may impact the quality of care received.

The accessibility, availability, and quality of cancer treatment are broad and complicated issues, yet there are significant and identifiable areas where action can be taken: current programs and services of all types, from health-care clinics to public health organizations, must collaborate to share information and best practices and to streamline service delivery; barriers must be reduced or eliminated; a qualified workforce must be available to provide treatment to Iowans in every part of the state; individuals living with cancer must be empowered to be active participants in their own care; and quality research must be a consistent priority.

This plan defines five priorities to assure all Iowans have access to the most appropriate cancer treatment:

1. Increase coordination of cancer early-detection and treatment activities.
2. Increase access to cancer treatment.
4. Implement health-care system-based strategies to improve quality cancer care.
5. Increase awareness of and participation in cancer clinical trials.


Priority I: Increase coordination of cancer early-detection and treatment activities.

Strategy A: Build or sustain coalitions with key stakeholders who can help enhance early-detection and cancer treatment activities.

Action Steps

1. Coordinate with cancer control programs, chronic disease programs, clinical settings, public health settings, and other key community sectors.
2. Facilitate improved health-care payment and delivery systems (e.g. ensure access to medical home).
3. Develop an integrated system of health education, screening, referral, and patient navigation.
4. Support policies, systems, and environmental approaches to expand access to and use of early detection and treatment programs.


Medical Home
An approach to providing comprehensive primary care. It is a health-care setting that facilitates partnerships between patients, physicians, and, when appropriate, patients’ family. Also known as a Patient-Centered Medical Home. 31

American Cancer Society (ACS)
The American Cancer Society is a nationwide, community-based voluntary health organization. ACS offers many services for cancer survivors and those who work to fight cancer. For more information on their services, visit http://www.cancer.org/Treatment/SupportProgramsServices/index.

National Cancer Institute (NCI)
The National Cancer Institute is part of the National Institutes of Health (NIH), which is part of the federal government. NCI offers many services for cancer survivors including the Cancer Information Service. For more information on the Cancer Information Service, visit http://www.cancer.gov/aboutnci/cis/page1.

Priority II: Increase access to cancer treatment.

Strategy A: Increase the number of Iowans with health benefits. ✓ ✓

Action Steps
1. Support and/or develop policies that increase the number of insured Iowans.
2. Educate the public on available insurance options.
3. Educate Iowans without coverage about other financial assistance options.

Strategy B: Reduce barriers to health-care access.

1. Using various methods, educate the public about available resources for financial assistance for health care.
2. Identify and change policies or regulations that restrict or create barriers to accessing quality cancer care, including those regarding transportation systems, affordable child/senior care, and culturally and linguistically appropriate information.
3. Increase the number of patients who use navigation services (e.g. American Cancer Society services, National Cancer Institute services, and care coordinators).
4. Provide culturally appropriate public education on health-care access issues.
5. Support and/or develop patient educational materials written in plain and multiple languages.
Priority III: Increase the availability of cancer treatment.

Strategy A: Attract and retain health-care providers.

Action Steps
1. Support and/or develop policies and practices that increase the number of health-care providers educated in Iowa.
2. Support and develop oncology continuing-medical-education opportunities for non-oncology health-care providers.
3. Support and/or develop policies and practices that offset financial disincentives associated with relocation in Iowa.
4. Support and/or develop policies and practices that set Medicare reimbursement equal to rates of other states.
5. Support and/or develop policies and practices to attract providers to rural Iowa.

Strategy B: Increase resources to health-care facilities.

Action Steps
1. Support and/or develop policies and practices to increase the use of telemedicine for rural populations.
2. Support and/or develop policies and practices for specialty outreach to medically underserved areas.
3. Support and/or develop research to determine geographic areas lacking cancer care services and support policies to address their needs.

Telemedicine
The use of remote telecommunications technology to diagnose and treat patients remotely.
Quality Oncology Practice Initiative (QOPI)
Part of the American Society of Clinical Oncology. The program is led by oncologists and is a practice-based quality improvement program. Its goal is to promote excellence in cancer care. For more information, visit http://qopi.asco.org/.

Rapid Quality Reporting System (RQRS)
A reporting tool that was created by the American College of Surgeons. It provides “real clinical time assessment of hospital level performance using NQF [National Quality Forum]-endorsed quality of cancer care measures for breast and colorectal cancers.” For more information, visit http://www.facs.org/cancer/ncdb/rqrs.html.

American College of Surgeons Commission on Cancer (ACoS CoC)
According to its website, the ACoS CoC “establishes standards to ensure quality, multidisciplinary, and comprehensive cancer care delivery in health care settings; conducts surveys in health care settings to assess compliance with those standards; collects standardized data from CoC-accredited health care settings to measure cancer care quality; uses data to monitor treatment patterns and outcomes and enhance cancer control and clinical surveillance activities, and develops effective educational interventions to improve cancer prevention, early detection, cancer care delivery, and outcomes in health care settings.” For more information, visit http://www.facs.org/cancer/coc/cocar.html.

National Accreditation Program for Breast Centers
Part of the American College of Surgeons. It is “a consortium of national, professional organizations dedicated to the improvement of the quality of care and the monitoring of outcomes for patients with diseases of the breast.” For more information, visit http://www.accreditedbreastcenters.org/.

Priority IV: Implement system-based health-care strategies to improve quality cancer care.

Strategy A: Increase the number of Iowans receiving treatment in accordance with national practice standards.

Action Steps
1. Promote participation by health-care entities in national quality-improvement initiatives.
2. Educate Iowans to advocate for treatment compliance with national standards.
3. Increase the use of quality reporting initiatives, including the American Society of Clinical Oncology’s Quality Oncology Practice Initiative (QOPI) and the American College of Surgeons Commission on Cancer’s Rapid Quality Reporting System (RQRS).

Strategy B: Increase the number of cancer centers accredited by national accrediting entities.

Action Steps
1. Increase the number of cancer centers accredited by the American College of Surgeons Commission on Cancer.
2. Increase the number of disease-site-specific accredited centers (e.g. breast centers accredited by the National Accreditation Program for Breast Centers.)
3. Facilitate the partnering of non-accredited centers with accredited programs to foster education and compliance with national practice standards.
**Strategy C:** Increase transparency in cancer treatment outcome reporting.

**Action Steps**
1. Develop or select a statewide dashboard tool for reporting progress in the quality of cancer care.
2. Collaborate with partners to implement use of a dashboard reporting tool.


**Dashboard Tool**

The Georgia Cancer Coalition developed a "dashboard" tool, consisting of cancer-specific metrics and programs to drive performance improvement in cancer care for their state. It is the long term goal of the Georgia Cancer Quality Information Exchange, an initiative to design, retrieve and aggregate clinical information and public health data on cancer care.  

**Cancer Care Plan**

A plan of professional clinical activities developed to describe the treatment regimen and arrangements for a person with cancer.

**Strategy D:** Increase the number of patients provided with a summary of their cancer care plan.

**Action Steps**
1. Review and evaluate current care plan using health literacy standards.
2. Use nationally recognized standards for cancer care plan summaries in all cancer centers.
3. Educate practitioners on the importance of the cancer care summary plan.

Improve the Accessibility, Availability, and Quality of Cancer Treatment Services and Programs.

**Clinical Trial**
A type of research study that tests how well new medical approaches work in people. These studies test new methods of screening, prevention, diagnosis, or treatment of a disease.33

**Priority V: Increase awareness of and participation in cancer clinical trials.**

**Strategy A:** Develop and promote public and health-care provider education campaigns to promote cancer clinical trial research.

**Action Steps**
1. Develop and implement a multi-layered professional education campaign to publicize the benefits of cancer clinical trial enrollment and the importance of referring patients to clinical trials.
2. Engage community leaders, patient advocacy groups, and local media to publicize the benefits of cancer clinical trial enrollment to the general public, including minorities and underserved populations.
3. Identify and use existing clinical trial educational resources.
4. Design and publicize clinical trial educational materials that address gaps existing in clinical trial educational resources.

**Strategy B:** Provide a statewide webpage with information regarding cancer clinical trials.

**Action Steps**
1. Conduct a comprehensive review of existing online cancer clinical trials information, and create and/or maintain a webpage on www.CancerIowa.org as a central repository for links to cancer clinical trial information for use by health-care professionals and consumers.


**Strategy C:** Increase participation in clinical trials.

**Action Steps**
1. Build or sustain coalitions with key stakeholders (e.g. cancer centers, independent cancer treatment providers, etc.) to enhance the availability of cancer clinical trials.
2. Support policies and systems to expand access to and use of cancer clinical trials.

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Targets for Change

→ Decrease the age-adjusted mortality per 100,000 for all cancer sites.
   2006-2008 Baseline: 178.2
   220.2 males
   150.2 females
   177.9 whites
   239.2 AA
   126.8 other
   2017 Goal: 160.4

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4 – mortality 1973-2008, state of Iowa)

This Target also aligns with: Healthy People 2020 C-1

→ Decrease the age-adjusted mortality per 100,000 for lung cancer.
   2006-2008 Baseline: 50.8
   67.1 males
   38.8 females
   50.8 whites
   75.6 AA
   20.2 other
   2017 Goal: 45.7

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4 – mortality 1973-2008, state of Iowa)

This Target also aligns with: Healthy People 2020, C-2

→ Decrease the age-adjusted mortality per 100,000 for female breast cancer.
   2006-2008 Baseline: 22.1
   22.0 whites
   33.1 AA
   10.1 other
   2017 Goal: 19.9

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4 – mortality 1973-2008, state of Iowa)

This Target also aligns with: Healthy People 2020, C-3

→ Decrease the age-adjusted mortality per 100,000 for colorectal cancer.
   2006-2008 Baseline: 17.5
   20.1 males
   15.5 females
   17.4 whites
   28.7 AA
   11.5 other
   2017 Goal: 15.7

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4 – mortality 1973-2008, state of Iowa)

This Target also aligns with: Healthy People 2020, C-5

→ Decrease the age-adjusted mortality per 100,000 for cervical cancer.
   2006-2008 Baseline: 2.1
   2.0 whites
   AA: not available
   Other: not available
   2017 Goal: 2.0

Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4 – mortality 1973-2008, state of Iowa)

This Target also aligns with: Healthy People 2020, C-4
Targets for Change

- **Decrease the age-adjusted mortality per 100,000 for prostate cancer.**
  
  2006-2008 Baseline: 24.6
  
  24.3 whites
  65.6 AA
  19.9 other
  
  2017 Goal: 22.1
  
  Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4 – mortality 1973-2008, state of Iowa)
  
  10% improvement
  
  *This Target also aligns with: Healthy People 2020, C-7*

- **Decrease the age-adjusted mortality per 100,000 for skin melanoma.**
  
  2006-2008 Baseline: 2.5
  
  3.6 males
  1.8 females
  2.6 whites
  AA: not available
  Other: not available
  
  2017 Goal: 2.4
  
  Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4 – mortality 1973-2008, state of Iowa)
  
  10% improvement
  
  *This Target also aligns with: Healthy People 2020, C-8*

- **Increase the percentage of survivors living five years after their initial cancer diagnosis.**
  
  2000-2003 Baseline: 65.1%
  
  64.4% males
  65.9% females
  64.9% whites
  55.1% AA
  58.6% other
  
  2017 Goal: 71.6%
  
  Citation: State Health Registry of Iowa (SEER*Stat version 7.0.4 – relative survival)
  
  10% improvement
  
  *This Target also aligns with: Healthy People 2020, C-13*

- **Increase the number of American College of Surgeons approved cancer programs in Iowa.**
  
  2010 Baseline: 16
  
  2017 Goal: 18
  

- **Increase the percentage of adult cancer patients participating in cancer clinical trials.**
  
  2010 Baseline: 8.0%
  
  2017 Goal: 8.8%
  
  
  10% improvement

- **Decrease the percentage of Iowans with no health insurance.**
  
  2007-2008 Baseline: 9.4%
  
  2017 Goal: 0%
  
  
  Due to new health-care legislation (the Affordable Care Act), the goal of 0% is realistic.
  
  *This Target also aligns with: Healthy People 2020, AHS-1.1*
Increase the percentage of cancer patients that receive follow-up instructions.

**2010 Baseline: 67.5%**  
**2017 Goal: 74.3%**

“Her cancer wasn’t ‘popular’ enough.”
When asked to describe her mom Linda, Gabbi DeWitt paints a picture of an eternal optimist who loved flower gardens – a woman in her 60’s who for so long was a picture of fitness and health.

“She loved to read with her book club, dance with her husband, travel with friends, and educate others. She loved growing roses, and was artistic and crafty. She was politically active and never shied away from sharing her opinions,” Gabbi says. “Most of all, she adored her grandchildren and spent every minute she could with them. The kids knew ‘Gramma Linda’ to be the one to give them cuddles, to read them fairy tales, to encourage their artistic passions.”

But Gabbi also remembers a woman in pain, frustrated by the medical system, lack of privacy, insensitivity from health-care providers, and preferential treatment for individuals with more common cancers.

“On June 25th, 2009, Coach Ed Thomas was shot in Parkersburg, Michael Jackson and Farrah Fawcett both died, and my mom was in surgery the entire day,” Gabbi remembers. That day Linda was diagnosed with stage-four appendix cancer. The brief 18 months of Linda's illness were filled with ups and downs. “It was a long road just getting to the diagnosis,” says Gabbi, “and an even longer road to her death.”

The journey was plagued by pain, as Linda underwent biopsies, exams, and procedures. While in recovery from her initial surgery she felt that the staff responsible for managing her pain was frustrated and angry with her for making their job more difficult. She felt mistreated and was left with a lack of trust of staff she didn't know.

This was especially a problem because although Linda was assigned an oncologist, nephrologist, and urologist during her regular course of treatment, she rarely saw the same physician or nurse when hospitalized for critical care. Leading up to diagnosis and throughout her treatment she often felt that because her physicians were so specialized that her total body care wasn't being fully considered. It took her family physician to determine the best way to deal with her problematic kidneys and still be allowed to have chemo treatments.

Gabbi particularly remembers the physician her mom saw for her initial consult and his “laissez-faire attitude toward what was about to be the biggest medical obstacle of my mom’s life.” She remembers feeling frustrated about his inability to see her mom as a human being and an individual. “Although he dealt with it everyday, it was the first time my mom had been seriously ill,” she says. “Needless to say, we did not go back to that doctor.”

Despite these struggles, Linda was continuously optimistic, even when it became clear that she most likely wouldn't beat her cancer. True to her spirit, she began a “miracle list” to keep track of the wonderful things that happened despite her health. Linda's miracles included her son being able to come home from Portland, her husband being able to take extended leave from work, and receiving a wheelchair from Hospice so she could get from room to room. “Every day she would say, ‘Oh! Add that to my miracle list,’” Gabbi remembers. “For her to find the good in an awful situation was humbling for all of us, and made us appreciate each day!”

This optimism could be hard to maintain. Necessary surgeries led to complications for Linda when using a restroom, and she often found that the public did not understand when it would take her longer than usual. Even during out-patient treatment in the hospital, Linda did not feel comfortable using a public restroom without a family member guarding the door. She found it humiliating and was frustrated at the lack of control she had over what cancer was doing to her body.

Gabbi says Linda also struggled during chemo when she felt left out of special treatment for individuals with more common cancers. “My mom noticed that the breast cancer patients would receive gifts, balloons, and special treatment from volunteers who were also breast cancer survivors. She didn't begrudge the women who received the special treatment, but she did feel a little put out that her rare stage-four appendix cancer wasn't worth a little extra hug or special treatment. Her cancer wasn't ‘popular’ enough.”

Because of these experiences, Gabbi says, “When my mom was going through chemo, and coping with the other complications that came from her surgery and her particular type of cancer, she was...”  (Continued...)
desperate to find someone who had been through her kind of treatment. Friends and family were wonderful, but they hadn’t ‘been there.’ One of her ‘miracles’ was that the Hospice social worker found someone in a very similar situation. “Phone calls between Linda and this individual greatly lifted her spirits. Gabbi says, “We only wished that we had pushed to help her find a peer sooner.”

When Linda was discharged from the hospital for the last time, Gabbi found herself in the role of home care aide. Despite working in a cancer-related program at the Black Hawk County Public Health Department, being a caregiver for her mother was a whole new world for Gabbi. With two small children and a career, it became her third full-time job.

“When I first learned about my mom’s diagnosis, I initially felt hopeless and helpless. I wanted to curl up into a ball and sleep until it was over, but I also wanted to be strong and help my parents. The cancer ride we were on was a very bumpy ride. My mom had lots of complications, lots of ups and downs. We learned to appreciate the good moments we had, and cherished them to the fullest. We became closer as a family and valued our time together. I had to be positive for my mom and dad. I tried to always be upbeat, but there were times when I would just find a bathroom to cry in. The battles she was fighting were so overwhelming.

“It became my mission to do as much for my mom as I could. Whether she was in the hospital or at home, with all the indignities her body had faced, I knew she would much rather have me doing her personal cares than anyone else. She told me that she was worried I would be ‘scarred’ from helping her so completely. But instead, it was an honor, and created sweet memories I will always cherish. There is something so personal and loving about caring for your parent.”

Looking back, Gabbi feels she now has a clearer understanding of how to help people caring for a loved one with cancer.

“Reach out to family members during their time of care giving. Send cards, offer to meet for coffee. Find a way to allow them to speak freely. If you have been through something similar, let them know, but don’t burden them with your story unless they are open to it. As a care giver, I had no room for empathy for others. I was so immersed in what I was doing for my mom, I simply had nothing left to give others. Now I find that hearing about other people's experiences and how they grieved the death of their parents very helpful. Finding peers has helped me talk through my grief process.

“Support means everything. We would not have made it through this experience without the support of my mom’s friends. If you are a friend, family member, or coworker, offer as much support as you can. Whether it is in the form of food, visits, phone calls, or cards – everything is appreciated. If you are a medical professional, think of ways you can link your patient to support resources. It is so important for the patient and the family to feel like there are other people who have walked the road you are walking.”

Gabbi also thinks that if her mom could share her experiences, she would want others living with cancer to feel empowered to advocate for themselves, to keep their primary care physicians involved in their care, to find peer support, to take action in their communities, to support cancer research, to embrace the hospice experience, and most of all, to live life to the fullest.

Today, Iowa has an estimated 124,000 people living with cancer.
Goal 4: Ensure Optimal Quality of Life for People Impacted by Cancer

Nearly every Iowan will be affected by cancer in their lifetimes, either through their own diagnosis or that of a loved one. Advances in screening, diagnosis, and treatment have boosted five-year survival rates from 50% in 1975 to 68% in 2002. Today, Iowa has an estimated 124,000 people living with cancer.

Quality of life is difficult to define and may have different meanings depending on factors like stage of life and cultural background. For the purpose of this plan, quality of life is defined as the overall enjoyment of life, including an individual’s sense of wellbeing and ability to carry out various activities. Enhancing the quality of life for a cancer survivor means working with the survivor throughout the cancer continuum, to prevent and manage the physical, psychosocial, and economic outcomes associated with cancer diagnosis and treatment. The following priorities present strategies that address the diverse aspects of quality of life for those living with cancer, from diagnosis on.

Each cancer survivor has unique individual needs. The best possible quality of life for cancer survivors comes from looking beyond medical aspects to a holistic view of the individual and community. Basic to this view is an emphasis on education for every party involved, increasing access to quality-of-life services, and growing the evidence base for quality-of-life research.

This Plan establishes three priorities to enhance the quality of life for cancer survivors in Iowa:

1. Increase awareness and knowledge of issues relevant to people impacted by cancer.
2. Increase access to quality-of-life services.
3. Enhance the quality and reach of survivorship research.

Quality of Life
The overall enjoyment of life, including an individual’s sense of wellbeing and ability to carry out various activities.

Cancer Continuum
Also called the Cancer Control Continuum. The term describes the delivery of care moving along the stages of prevention, detection/screening, diagnosis, treatment, survivorship, and end of life. An individual may move forward and back along the continuum several times before staying in survivorship or progressing to end of life. Other entities view that the cancer continuum starts at diagnosis and does not include prevention or detection.

Psychosocial
Describes the psychological, social and spiritual aspects of human activity.

Cancer Survivor
Anyone affected by cancer, including the individual diagnosed, family, friends, and caregivers.

Community
The general public as a group.

Survivorship
In cancer, survivorship covers the physical, psychosocial, and economic issues of cancer, from diagnosis until the end of life. It focuses on the health and life of a person with cancer beyond the diagnosis and treatment phases. Survivorship includes issues related to the ability to get health care and follow-up treatment, late effects of treatment, second cancers, and quality of life. Family members, friends, and caregivers are also part of the survivorship experience.

Ensure Optimal Quality of Life for People Impacted by Cancer.

**Palliative Care**
Care given to improve the quality of life of patients who have a serious or life-threatening disease. The goal of palliative care is to prevent or treat as early as possible the symptoms of a disease, side effects caused by treatment of a disease, and psychological, social, and spiritual problems related to a disease or its treatment. Also called comfort care, supportive care, and symptom management.  

**Survivorship Care Plan**
A survivorship care plan is similar to a cancer care plan but it extends beyond planned treatment activities. It is “a synoptic document that describes the patient’s cancer treatment experience and provides guidance for the patient’s future care for the patient and provider.”

**Priority I: Increase awareness and knowledge of issues relevant to people impacted by cancer.**

**Strategy A: Educate target populations about quality-of-life concerns in cancer survivors.**

**Action Steps**
1. Coordinate with quality-of-life stakeholders, including survivors, to develop and promote quality-of-life messages that are consistent and linked to data and research.
2. Increase the number of cancer survivors and health-care providers who are aware of and use www.CancerIowa.org for trusted quality-of-life resources.
3. Educate health-care providers, patients, families, and community on
   - Benefits of **palliative care**
   - Dimensions of quality of life (e.g., physical, spiritual, emotional)
   - Elements of successful transitions for cancer survivors through age-specific needs
   - Financial, psychosocial, palliative care, and wellness resources
   - Long-term and latent effects of cancer treatment and benefits of using **survivorship care plans**
   - Specific and unique needs of cancer survivors, including sexual health, physical activity, nutrition, fertility, depression, anxiety, palliative care, and end of life
   - Symptom management throughout the cancer continuum and the benefits of using cancer care plans
4. Educate providers, patients, families, and communities on successful transitions, including
   - Educate parents, providers, school systems, children, and peers about social reintegration for youth after cancer diagnosis.
   - Educate providers, survivors, and their communities on age-specific transitional needs (e.g., changes in social relationships, return to work, job retraining, and retirement plans) of cancer survivors.
5. Educate key decision makers about quality of life issues, services, and research.


Overarching Issues: ✔ Collaboration | ✔ Disparities | ✔ Workforce | ✔ Policy & Systems | ✔ Research | ✔ Evaluation

Strategy B: Increase health-care provider awareness and knowledge of quality-of-life issues. ✔ ✔

Action Steps
1. Collaborate with professional organizations on quality-of-life education.
2. Work with health professional training programs to enhance quality-of-life education in health-care provider curriculums.
3. Educate health-care providers on the importance of early and regular conversations with patients on goals of care.
4. Train providers on how to communicate difficult information.

Ensure Optimal Quality of Life for People Impacted by Cancer.

Symptom Management
Care given to improve the quality of life of patients who have a serious or life-threatening disease. The goal of symptom management is to prevent or treat as early as possible the symptoms of a disease, side effects caused by treatment of a disease, and psychological, social, and spiritual problems related to a disease or its treatment. Also called comfort care, palliative care, and supportive care.

Priority II: Increase access to quality-of-life services.

Strategy A: Increase access to quality clinical services for cancer survivors.

**Action Steps**
1. Continue primary, secondary, and tertiary prevention efforts for survivors.
2. Ensure that cancer survivors have post-treatment access to a medical home.

Strategy B: Ensure the availability of quality-of-life services.

**Action Steps**
1. Assess and enhance the capacity to support survivorship interventions.
2. Evaluate gaps in services and develop programs when necessary.
3. Increase the number of staff trained in cancer services.
4. Increase the number of providers in medically underserved areas who are trained in quality-of-life issues.
5. Increase awareness of available quality-of-life services through multi-media and community outlets.
6. Determine the level of expertise necessary and available to advance survivorship activities.
7. Increase the number of Iowans who have access to palliative care and symptom-management services.
8. Collaborate with quality-of-life stakeholders, including survivors, to educate policy makers for effective quality-of-life health policies.

Strategy C: Identify and evaluate financial barriers to quality-of-life services.

**Action Steps**
1. Evaluate availability and awareness of statewide financial assistance programs.
2. Support local, state, and national policies that provide monetary resources to survivors.
3. Support policy change with public and private insurers for coverage of evidence-based supportive services that positively impact cancer patients’ quality of life.
4. Educate legislators about the importance of reducing financial barriers to quality-of-life services.
Overarching Issues: 🟢 Collaboration | 🟢 Disparities | 🟢 Workforce | 🟢 Policy & Systems | 🟢 Research | 🟢 Evaluation

Quality of Life

Strategy D: Increase the number of people living with cancer who are offered and use survivorship care plans. ✔

Action Steps
1. Determine whether and to what extent current cancer care plans address survivorship.
2. Increase the number of providers who follow nationally recognized recommendations when creating survivorship care plans for cancer patients.
3. Support programs that empower cancer survivors to understand and participate in the development and use of their care plans.

Strategy E: Ensure the provision of adequate psychosocial services starting from diagnosis throughout the course of life. ✔

Action Steps
1. Assess patient and health-care provider awareness of the need for and positive outcomes that result from the use of psychosocial services.
2. Evaluate the availability and use of evidence-based psychosocial services.

Strategy F: Identify and reduce language and cultural barriers Iowans face when accessing and using quality-of-life services. ✔ ✔

Action Steps
1. Ensure availability of culturally appropriate services.
2. Support the development and use of plain-language resources such as decision-aid tools and survivorship care plans (e.g. treatment summary, follow-up instructions, rescreening guidelines, risk factor reduction).
3. Support the coordination of services for cancer survivors with specific and unique needs.

Behavioral Risk Factor Surveillance System (BRFSS)
The Behavioral Risk Factor Surveillance System (BRFSS) was created by the Centers for Disease Control and Prevention. It is the largest continuously conducted telephone survey in the world and is conducted by the state. For more information, visit http://www.idph.state.ia.us/brfss/.

National Health Interview Survey (NHIS)
Data for the NHIS is collected through personal household interviews. The survey has been conducted for over 50 years by the U.S. Census Bureau. For more information, visit http://www.cdc.gov/nchs/nhis.htm.

**Priority III: Enhance the quality and reach of survivorship research.**

**Strategy A:** Develop, enhance, and use cancer surveillance data to define the scope, needs, and health behaviors of cancer survivors. ✅ ✅

**Action Steps**

1. Use and maintain the Behavioral Risk Factor Surveillance System (BRFSS) and National Health Interview Survey (NHIS) survivorship modules.
2. Use cancer registry data to develop and implement interventions for follow-up treatment and care among cancer survivors.
3. Monitor and track progress of cancer survivors' health, economic, and psychosocial issues.


**Strategy B:** Use evidence-based quality-of-life interventions and programs, and conduct research to further the evidence base. ✅ ✅ ✅ ✅

**Action Steps**

1. Determine what and where quality-of-life research gaps exist.
2. Collaborate with relevant research partners to research issues affecting people impacted by cancer, with a focus on diverse and/or understudied populations.
3. Disseminate results from quality-of-life interventions (e.g., peer-reviewed journals, internal reports, conferences, presentations).
4. Implement evidence-based interventions or practices regarding quality-of-life issues.
5. Promote evaluation of all quality-of-life interventions.


**Targets for Change**

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<tr>
<th>Quality of Life</th>
<th>Iowa Cancer Plan</th>
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- **Increase the percentage of cancer patients who report their pain is under control.**
  - **2010 Baseline:** 78.6%
  - **2017 Goal:** 86.5%
  - **Citation:** Iowa Department of Public Health. (2011). *Behavioral Risk Factor Surveillance System: Survivorship Module, 2010*. Des Moines, IA: Iowa Department of Public Health. Received ahead of print.
  - **This Target also aligns with:** Healthy People 2020, C-14

- **Increase the number of Iowa hospitals with a palliative care program.**
  - **2008 Baseline:** B
  - **2017 Goal:** A
  - **Citation:** Center to Advance Palliative Care. (2008). *America’s Care of Serious Illness: A State-by-State Report Card on Access to Palliative Care in Our Nation’s Hospitals.*

- **Improve the state grade for pain policies.**
  - **2008 Baseline:** B
  - **2017 Goal:** A
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<th><strong>Glossary</strong></th>
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<td><strong>2000 International Residential Building Code</strong></td>
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<td><strong>American Cancer Society (ACS)</strong></td>
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<td><strong>American College of Surgeons Commission on Cancer (ACOS COC)</strong></td>
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<td><strong>Behavioral Risk Factor Surveillance System (BRFSS)</strong></td>
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<td><strong>Cancer Burden</strong></td>
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<td><strong>Cancer Care Plan</strong></td>
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<td><strong>Cancer Continuum</strong></td>
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<td><strong>Cancer Risk Assessment</strong></td>
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<td><strong>Complete Streets</strong></td>
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Dashboard Tool  The Georgia Cancer Coalition developed what they call a “dashboard” tool, consisting of cancer-specific metrics and programs to drive performance improvement in cancer care for their state. It is the long term goal of the Georgia Cancer Quality Information Exchange, an initiative to design, retrieve and aggregate clinical information and public health data on cancer care.

E-Cigarettes  Electrical devices that mimic the act of smoking tobacco and create an inhaled mist. Also known as electronic cigarettes, they are marketed as a smoking-cessation tool, but may have negative health effects.

Evidence-Based Public Health  The development, implementation, and evaluation of effective programs and policies in public health. This is done through the application of principles of scientific reasoning. Evidence-based public health includes the appropriate use of behavioral science theory and program planning models.

Fecal Occult Blood Test (FOBT)  A test that detects hidden blood within a stool sample, which may indicate colorectal cancer.

Genetic Clinical Nurses  Registered nurses who have special education and training in the field of genetics.

Genetic Counseling  “A communication process that seeks to assist affected or at-risk individuals and families in understanding the natural history, disease risks, and mode of transmission of a genetic disorder; to facilitate informed consent for genetic testing when appropriate; to discuss options for risk management and family planning; and to provide for or refer individuals for psychosocial support as needed.” (See p. 23 for citation.)

Health Care Organizations  Including, but not limited to, health agencies, systems, and clinics.

Health Disparity  A “particular type of health difference that is closely linked with social or economic disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater social and/or economic obstacles to health and/or a clean environment based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation; geographic location; or other characteristics historically linked to discrimination or exclusion.” (See p. 8 for citation.)

Health Equity  “The absence of systematic disparities in health (or its social determinants) between more and less advantaged social groups.” (See p. 8 for citation.)

Health Policy  “Refers to decisions, plans, and actions that are undertaken to achieve specific health care goals within a society. An explicit health policy can achieve several things: it defines a vision for the future which in turn helps to establish targets and points of reference for the short and medium term. It outlines priorities and the expected roles of different groups; and it builds consensus and informs people.” (See p. 8 for citation.)

Human Papillomavirus (HPV)  The most common sexually transmitted infection (STI). There are more than 40 types of HPV that can infect the genital areas, mouths, and throats of males and females.
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<tr>
<th>Glossary Term</th>
<th>Definition</th>
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<tr>
<td>Immunization Registry Information System (IRIS)</td>
<td>A computerized tracking program that documents the immunizations for children, adolescents, and adults who are seen in a number of public and private health care provider sites throughout the state. For more information, visit <a href="http://www.idph.state.ia.us/ImmTB/Immunization.aspx?prog=Imm&amp;pg=Iris">http://www.idph.state.ia.us/ImmTB/Immunization.aspx?prog=Imm&amp;pg=Iris</a>.</td>
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<tr>
<td>Intervention</td>
<td>An action taken to improve a situation. In this plan, intervention usually refers to an action taken by public health or health-care professionals to improve health.</td>
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<td>Iowans Fit for Life</td>
<td>A joint statewide initiative between the Iowa Department of Public Health and its partners that promotes increased opportunities for physical activity and healthy eating for Iowans of all ages. Ultimately, Iowans Fit for Life aims to improve the health of Iowans by reducing the risks and preventing disease related to inactivity and unhealthy eating behaviors. For more information, visit <a href="http://www.idph.state.ia.us/iowansfitforlife/">http://www.idph.state.ia.us/iowansfitforlife/</a>.</td>
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<tr>
<td>Live Healthy Iowa</td>
<td>Created by the Iowa Sports Foundation to help Iowans lose weight and be healthier. For more information, visit <a href="http://www.livehealthyiowa.org/default.aspx">www.livehealthyiowa.org/default.aspx</a>.</td>
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<tr>
<td>Medical Home</td>
<td>An approach to providing comprehensive primary care. It is a health-care setting that facilitates partnerships between patients, physicians, and, when appropriate, patients’ family. Also known as a Patient-Centered Medical Home.</td>
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<td>National Accreditation Program for Breast Centers</td>
<td>Part of the American College of Surgeons. It is “a consortium of national, professional organizations dedicated to the improvement of the quality of care and the monitoring of outcomes for patients with diseases of the breast.” For more information, visit <a href="http://www.accreditedbreastcenters.org/">http://www.accreditedbreastcenters.org/</a>.</td>
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<td>National Cancer Institute (NCI)</td>
<td>The National Cancer Institute is part of the National Institutes of Health (NIH), which is part of the federal government. NCI offers many services for cancer survivors including the Cancer Information Service. For more information on the Cancer Information Service, visit <a href="http://www.cancer.gov/aboutnci/cis/page1">http://www.cancer.gov/aboutnci/cis/page1</a>.</td>
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<td>National Health Interview Survey (NHIS)</td>
<td>Data for the NHIS is collected through personal household interviews. The survey has been conducted for over 50 years by the U.S. Census Bureau. For more information, visit <a href="http://www.cdc.gov/nchs/nhis.htm">http://www.cdc.gov/nchs/nhis.htm</a>.</td>
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<tr>
<td>Nicotine Replacement Therapy (NRT)</td>
<td>The use of gums, patches, sprays, inhalers, or lozenges that contain nicotine, but do not contain other harmful chemicals in tobacco, to help smokers quit smoking. NRT can help relieve some withdrawal symptoms associated with efforts to quit smoking.</td>
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<td>Palliative Care</td>
<td>Care given to improve the quality of life of patients who have a serious or life-threatening disease. The goal of palliative care is to prevent or treat as early as possible the symptoms of a disease, side effects caused by treatment of a disease, and psychological, social, and spiritual problems related to a disease or its treatment. Also called comfort care, supportive care, and symptom management.</td>
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<tr>
<td>Primary Prevention</td>
<td>Measures taken to prevent disease or injury before they occur.</td>
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<td>Psychosocial</td>
<td>Describes the psychological, social and spiritual aspects of human activity.</td>
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<td><strong>Public Health Services Guidelines</strong></td>
<td>The Public Health Service (PHS) created a Clinical Practice Guideline for treating tobacco use and dependence.</td>
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<td><strong>Quality of Life</strong></td>
<td>The overall enjoyment of life, including an individual's sense of wellbeing and ability to carry out various activities.</td>
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<td><strong>Quality Oncology Practice Initiative (QOPI)</strong></td>
<td>Part of the American Society of Clinical Oncology. The program is led by oncologists and is a practice-based quality improvement program. Its goal is to promote excellence in cancer care. For more information, visit <a href="http://qopi.asco.org/">http://qopi.asco.org/</a>.</td>
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<tr>
<td><strong>Quitline Iowa</strong></td>
<td>A statewide toll-free smoking-cessation hotline. For more information, call 1-800-QUIT-NOW (1-800-784-8669), or visit <a href="https://www.quitlineiowa.org/">https://www.quitlineiowa.org/</a>.</td>
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<td><strong>Radon</strong></td>
<td>A radioactive gas found in outdoor and indoor air at various concentrations. It is the second leading cause of lung cancer after smoking and the number-one leading cause of lung cancer among non-smokers.</td>
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<td><strong>Radon Mitigation</strong></td>
<td>Any process or action that is done to reduce radon concentrations in a building.</td>
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<td><strong>Rapid Quality Reporting System (RQRS)</strong></td>
<td>A reporting tool that was created by the American College of Surgeons. It provides &quot;real clinical time assessment of hospital level performance using NQF [National Quality Forum]-endorsed quality of cancer care measures for breast and colorectal cancers.&quot; For more information, visit <a href="http://www.facs.org/cancer/ncdb/rqrs.html">http://www.facs.org/cancer/ncdb/rqrs.html</a>.</td>
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<td><strong>Secondhand Smoke</strong></td>
<td>A mixture of two forms of smoke that come from burning tobacco: sidestream smoke and mainstream smoke. Sidestream smoke comes from the end of a lighted cigar, pipe, or cigarette. Mainstream smoke is exhaled by a smoker.</td>
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<tr>
<td><strong>Smoke Free Air Act</strong></td>
<td>In 2008, the Iowa legislature passed a law to protect employees and the general public from secondhand smoke. The act prohibits smoking in almost all public places, enclosed areas within places of employment, and some outdoor areas. For more information, visit <a href="http://www.iowasmokefreeair.gov/">http://www.iowasmokefreeair.gov/</a>.</td>
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<tr>
<td><strong>Smoking Cessation</strong></td>
<td>Process of discontinuing the practice of smoking.</td>
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<td><strong>Survivorship</strong></td>
<td>In cancer, survivorship covers the physical, psychosocial, and economic issues of cancer, from diagnosis until the end of life. It focuses on the health and life of a person with cancer beyond the diagnosis and treatment phases. Survivorship includes issues related to the ability to get health care and follow-up treatment, late effects of treatment, second cancers, and quality of life. Family members, friends, and caregivers are also part of the survivorship experience.</td>
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<td><strong>Survivorship Care Plan</strong></td>
<td>A survivorship care plan is similar to a cancer care plan but it extends beyond planned treatment activities. It is &quot;a synoptic document that describes the patient’s cancer treatment experience and provides guidance for the patient's future care for the patient and provider.&quot; (See p. 54 for citation.)</td>
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<td><strong>Symptom Management</strong></td>
<td>Care given to improve the quality of life of patients who have a serious or life-threatening disease. The goal of symptom management is to prevent or treat as early as possible the symptoms of a disease, side effects caused by treatment of a disease, and psychological, social, and spiritual problems related to a disease or its treatment. Also called comfort care, palliative care, and supportive care.</td>
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<td><strong>Telemedicine</strong></td>
<td>The use of remote telecommunications technology to diagnose and treat patients remotely.</td>
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<tr>
<td><strong>Underinsured</strong></td>
<td>Having inadequate health insurance coverage.</td>
</tr>
<tr>
<td><strong>Uninsured</strong></td>
<td>Not covered by health insurance.</td>
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<tr>
<td><strong>Vaccine for Children Program</strong></td>
<td>A federally funded program that provides vaccines at no cost to children who may not otherwise be able to be vaccinated because of inability to pay. For more information, visit <a href="http://www.cdc.gov/vaccines/programs/vfc/default.htm">http://www.cdc.gov/vaccines/programs/vfc/default.htm</a>.</td>
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Participate in the evolution of the Iowa Cancer Plan and statewide comprehensive cancer control at CancerIowa.org.