

Wisconsin Cancer Plan

2020 - 2030

A Blueprint for Action



Wisconsin
Cancer
Collaborative
REDUCING THE BURDEN TOGETHER

Published by the Wisconsin Cancer Collaborative, August 2020. For more information, and to view the action steps and data measures for the Wisconsin Cancer Plan 2020-2030, please visit www.wicancer.org.

Suggested citation: Wisconsin Cancer Plan 2020-2030. Madison, WI: University of Wisconsin Carbone Cancer Center and Wisconsin Department of Health Services; 2020. Available online at: www.wicancer.org.



**This Plan is
dedicated to
cancer survivors,
caregivers,
and everyone
in Wisconsin
whose lives have
been touched
by cancer.**

Table of Contents

Introduction:

Vision, mission, and overarching goals 1
Using the Wisconsin Cancer Plan 2020-2030 to take action 2
How the Wisconsin Cancer Plan 2020-2030 was developed 2

Member Organizations 3

Understanding Policy, Systems, and Environmental Change 5

Understanding Wisconsin’s Cancer Burden 6

Priorities, Strategies, and Key Terms:

Chapter 1: Health Equity 8
Chapter 2: Risk Reduction 12
Chapter 3: Early Detection and Screening 18
Chapter 4: Treatment 24
Chapter 5: Survivorship 30
Chapter 6: End of Life 34
Chapter 7: Data 38

Evaluation Plan 41

References 42



Introduction

Cancer is a leading cause of death in Wisconsin, with nearly 12,000 deaths and more than 30,000 new diagnoses each year.

The burden of cancer remains vast, taking a physical, emotional, social, and financial toll on patients, families, caregivers, and communities. Unfortunately, some of our communities are burdened far more than others, because of historical and continued unjust allocation of resources and access to care.

Every Wisconsinite should have the ability to reduce their cancer risk, receive timely diagnosis of and quality treatment for cancer, and enjoy the highest possible quality of life beyond a cancer diagnosis.

The Wisconsin Cancer Plan 2020-2030 lays forth a blueprint for action with a singular vision: creating a healthier Wisconsin by reducing the burden of cancer for everyone. It spans the entire cancer control continuum, from risk reduction through end of life. The success of the Wisconsin Cancer Plan depends on people and organizations from multiple sectors coming together to take action.

Vision

A healthier Wisconsin by reducing the burden of cancer for everyone.

Mission

To engage diverse partners to develop, promote, and implement a statewide comprehensive approach to cancer control.

Overarching Goals

- 1 Advance health equity as it relates to cancer.
- 2 Reduce the risk of developing cancer.
- 3 Detect cancer at the earliest stage possible.
- 4 Reduce death and suffering from cancer.
- 5 Improve the quality of life for cancer survivors.
- 6 Improve the quality and use of cancer-related data.

Using the Wisconsin Cancer Plan 2020-2030 to take action

Organizations can look to the Wisconsin Cancer Plan 2020-2030 for evidence-based, sustainable solutions to reduce the burden of cancer in their communities and across the state, through policy and systems-level change.

The Wisconsin Cancer Plan 2020-2030 includes a framework that encompasses the vision, mission, and overarching goals across seven chapters. Each chapter includes priorities, strategies, and specific action steps. To allow for routine revisions, action steps are only available in the online version of the Wisconsin Cancer Plan 2020-2030 at www.wicancer.org.



How the Wisconsin Cancer Plan 2020-2030 was developed

The Wisconsin Cancer Plan 2020-2030 was developed by the Wisconsin Cancer Collaborative, a statewide coalition of more than 140 organizations. Over the course of 18 months, a 20-person Steering Committee, representing multiple sectors and organization types, established a framework and guided a process to gather input from stakeholders across the state. Stakeholders convened twice in-person between June and October 2019 to review evidence and share ideas. Input was reviewed, summarized, and incorporated by staff, stakeholders, and Steering Committee members between October 2019 and May 2020.

The Wisconsin Cancer Plan 2020-2030 will be maintained and updated by the Wisconsin Cancer Collaborative's Steering Committee and members. Changes based on evolving evidence and emerging needs can be requested online at www.wicancer.org. Requests will be reviewed quarterly by the Wisconsin Cancer Collaborative's Steering Committee. A review of data and progress toward goals will be routinely reported to members and will be used to determine any needed revisions.

Member Organizations

AbbVie
ABCD: After Breast Cancer Diagnosis
Access Community Health Centers
Advancing a Healthier Wisconsin Endowment
Affinity Health System - St. Elizabeth Hospital
Aha! Empowered Wellness Center
Altcare Health Services
American Cancer Society
American Cancer Society Cancer Action Network
American Heart Association
American Lung Association in Wisconsin
Appleton Health Department
Ascension Wisconsin - Columbia St. Mary's
Ascension Wisconsin - Wheaton Cancer Care
Ashland County Health and Human Services
Aspirus Wausau Hospital
AstraZeneca
Advocate Aurora Health
Barron County Health and Human Services
Bayfield County Health Department
Beaver Dam Community Hospital
Bellin Health
Breast Cancer Family Foundation
Breast Cancer Recovery
Bristol-Myers Squibb
Cancer Center of Western Wisconsin
Cancer Health Disparities Initiative
Center for Patient Partnerships
Center for Urban Population Health
Central Wisconsin Health Partnership
Cervivor
Children's Health Alliance of Wisconsin
Chix 4 a Cause LTD
City of Franklin Health Department
City of Wauwatosa Health Department
Columbia St. Mary's
Community Action for Healthy Living, Inc.
Community Advocates
Cutting Edge Health Team
Cynthia's Breast Cancer Giving Circle
Decipher Biosciences
Eau Claire City County Health Department
Eisai, Inc.
Essential Health Clinic
Fond du Lac County Health Department
Forest County Potawatomi Community
Fox Valley Advance Care Planning Partnership
Fox Valley Hematology and Oncology
Froedtert and the Medical College of Wisconsin
GeneLaw Consulting LLC
Genentech
Gerald L. Ignace Indian Health Center
Gilda's Club Madison
Green Bay Oncology
Green Lake County Department of Health & Human Services
Gundersen Health System
Health Monitor
Holy Family Memorial Cancer Center
HSHS Division - Eastern Wisconsin
HSHS Sacred Heart Hospital
HSHS St. Vincent Hospital
Iron County Health Department
Jackson County Department of Health and Human Services
Janssen Oncology/Johnson and Johnson Health Care Services, Inc.
Juneau County Health Department
La Crosse Area Family YMCA
La Crosse County Health Department
Lakeshore Community Health Care
Langlade County Health Department
Leukemia and Lymphoma Society
Lung Cancer Research Foundation
Manitowoc County Health Department
Marathon County Health Department
Marquette County Health Department
Marquette University College of Nursing Institute for Palliative and End of Life Care
Marshfield Clinic
Mayo Clinic Health System - Franciscan Healthcare

List continued on page 4...

Member Organizations (continued)

McDowell Capitol Consulting
Medical College of Wisconsin
Merck
Mercyhealth
Milwaukee Consortium for Hmong Health
Ministry Saint Joseph's Hospital
Monroe County Senior Services
Morgridge Institute for Research
No Stomach for Cancer
Northeast Wisconsin Area Health Education Center
Northwest Wisconsin Cancer Center
Oconto County Health and Human Services
Oneida County Health Department
Outagamie County Public Health Division
Pfizer
Pierce County Public Health Department
Planned Parenthood of Wisconsin, Inc.
Portage County Health and Human Services
Progressive Community Health Centers
Public Health Madison and Dane County
Red Cliff Community Health Center
Richland County Health and Human Services
Rural Wisconsin Health Cooperative
Saint Croix County HHS/Public Health
Scenic Bluffs Community Health Centers
Scenic Rivers Area Health Education Center (AHEC)
Scott Consulting Partners
Sheboygan County Cancer Care Fund
Sixteenth Street Community Health Centers
SSM Health
St. Mary's Hospital Janesville
Stockbridge Munsee Community
Susan G. Komen Wisconsin
ThedaCare Cancer Care
Triage Cancer
Tricia's Troops Cancer Connection
Turville Bay MRI and Radiation Oncology Center
University of Wisconsin Carbone Cancer Center
University of Wisconsin Center for Tobacco
Research and Intervention
University of Wisconsin Medical Foundation
University of Wisconsin Milwaukee College of Nursing
University of Wisconsin Population Health Institute
University of Wisconsin Department of Dermatology
University of Wisconsin Department of Obstetrics
and Gynecology
University of Wisconsin Department of Population
Health Sciences
University of Wisconsin Extension - Green Lake County
University of Wisconsin School of Medicine
and Public Health
University of Wisconsin Green Bay
UW Health Breast Center
UW Health Cancer Center at ProHealth Care
Vitas Health Care, Inc.
Waushara County University of Wisconsin-Extension
Wisconsin State Laboratory of Hygiene/University of
Wisconsin-Madison
Winnebago County Health Department
Wisconsin Alcohol Policy Project
Wisconsin Alliance for Women's Health
Wisconsin Association of Hematology and
Oncology (WAHO)
Wisconsin Breast Cancer Coalition
Wisconsin Bureau of Community Health Promotion
Wisconsin Cancer Reporting System
Wisconsin Cancer Risk Program Network
Wisconsin Environmental Public Health
Tracking Program
Wisconsin Health Literacy
Wisconsin Immunization Program
Wisconsin Indianhead Technical College
Wisconsin Medical Society
Wisconsin Nurses Association
Wisconsin Primary Health Care Association
Wisconsin Public Health Association
Wisconsin Radon Program
Wisconsin Tobacco Prevention and Control Program
Wisconsin Well Woman Program
Wisconsin Women's Health Foundation
Wood County Health Department



Understanding Policy, Systems, and Environmental Change

Healthy behaviors never happen in a vacuum.

The choices we make that affect our health are shaped by the policies that govern our communities, organizations (or “systems”) such as schools and clinics, and the physical and social environment in which we live.

For example:

- A teen is less **likely to smoke** when his community enacts laws to limit youth tobacco access.
- A parent is **more likely to vaccinate** their child to prevent HPV infection when a medical provider recommends the vaccine, and the medical provider is more likely to recommend a vaccine when a reminder system is in place.
- A family is **more likely to get the exercise they need** when their neighborhood includes safe sidewalks and parks.

These behaviors—and many, many more—reduce our risk of cancer and improve our health.

We can make sure healthy behaviors are practical and available for everyone in our communities when we consider the policies, systems, and environments that influence those behaviors. This approach is known as “policy, systems, and environmental change” (or PSE change).



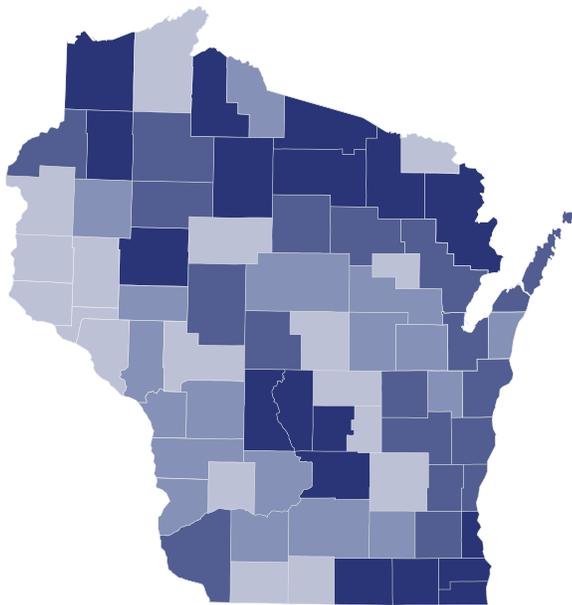
When we improve policies, systems, and environments, we can create lasting health improvements for everyone.

The Wisconsin Cancer Plan 2020-2030 promotes individual health behaviors that are strongly supported by policy, systems, and environmental changes to reduce the burden of cancer for everyone in Wisconsin. We all have a role in shaping and creating policies.

Understanding Wisconsin's Cancer Burden

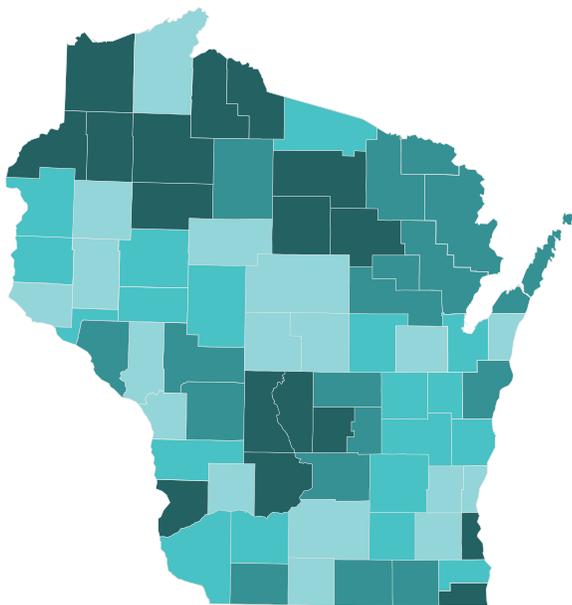
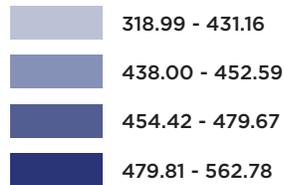
To create a blueprint for reducing the burden of cancer in Wisconsin, we need a broad understanding of how cancer affects our state.

The charts below provide a snapshot of cancer cases and cancer deaths in Wisconsin by county from 2012 to 2016:



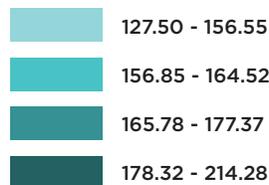
Age-Adjusted Invasive Cancer Incidence Rates in Wisconsin
All Cancer Sites 2012-2016
By County
Age-Adjusted to the 2000 U.S. Standard Million Population

Wisconsin Rate: 466.86/per 100,000



Age-Adjusted Cancer Mortality Rates in Wisconsin
All Cancer Sites 2012-2016
By County
Age-Adjusted to the 2000 U.S. Standard Million Population

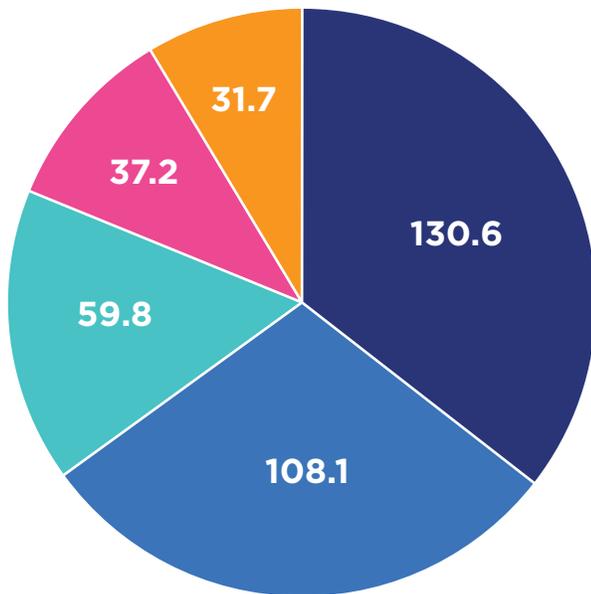
Wisconsin Rate: 162.76/per 100,000



Note: All rates are per 100,000. Maps are based on data from the Wisconsin Cancer Reporting System. Data accessed April 2020.

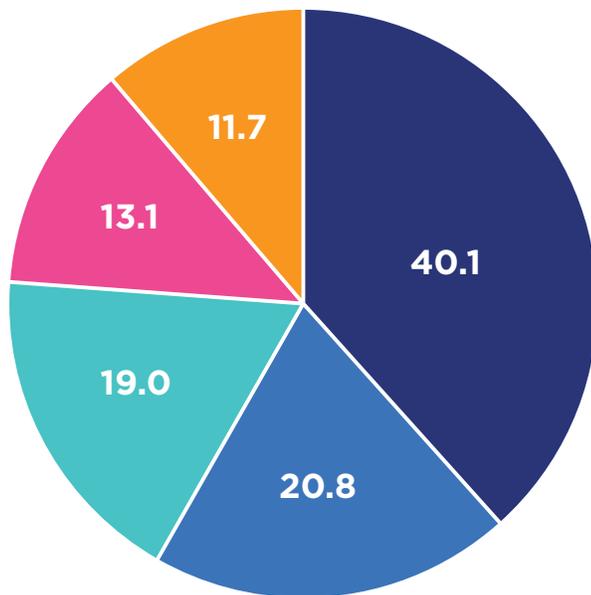
Cancer is a leading cause of death in our state.

Wisconsin and the United States share the same five most commonly diagnosed and five most commonly fatal cancers. Three of the five most commonly diagnosed cancers in Wisconsin (colorectal, breast, and prostate) are among the top five cancers that cause the most deaths.



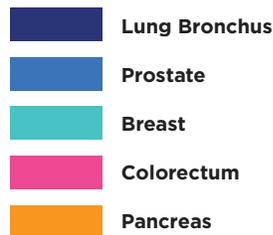
Most Commonly Diagnosed Cancer Types in Wisconsin 2012-2016

All incidence rates expressed per 100,000



Five Leading Causes of Cancer Deaths in Wisconsin 2012-2016

All incidence rates expressed per 100,000



Note: Rates are age-adjusted to the 2000 U.S. Standard Million Population. Charts are based on data from the American Cancer Society, Cancer Statistics Center. Data accessed May 2020.



Chapter 1

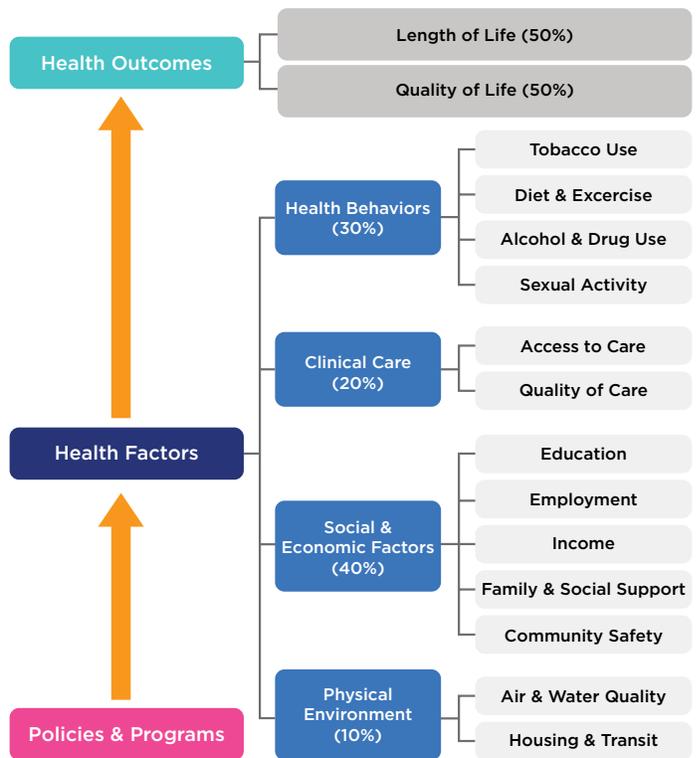
Health Equity

Everyone in Wisconsin deserves the chance to live life to the fullest.

This means having the resources needed to make healthy choices and receiving the highest quality care. Unfortunately, too many Wisconsinites are denied this opportunity because of historical and contemporary injustices, geographic location, and critical gaps in culturally responsive health care services.

In Wisconsin today, some populations are more likely to develop cancer and die from cancer. These inequities may be based on one’s race or ethnicity, socioeconomic status, gender, age, religion, mental health, ability status, body size, sexual orientation, gender identity, geographic location, or other characteristics linked to racism, discrimination, and exclusion.

Social and economic factors, as well as our physical environment, contribute to health and health inequities. Where people are born, live, work, worship, learn, play, and age—otherwise known as the social determinants of health—can make it more or less challenging to access quality health care and engage in healthier behaviors, which largely determine the quality and length of one’s life.



County Health Rankings model ©2014 UWPHI¹

We can ensure health equity for all when we:

- Increase our state’s capacity to reduce the burden of cancer for everyone.
- Increase the number of Wisconsinites who have access to quality health care that is both culturally and linguistically appropriate.
- Prioritize activities that engage, center, and benefit populations at higher risk of health-related inequities.
- Commit organizational energy to addressing social determinants of health.

The Takeaway

We will improve health outcomes for everyone in Wisconsin when we improve the conditions in which people are born, live, work, worship, learn, play, and age. By incorporating health equity into cancer control efforts, we can reduce the unequal burden of cancer in Wisconsin.



Key Terms

Health equity: A condition achieved when every person has the opportunity to “attain their full health potential” and no one is “disadvantaged from achieving this potential because of social position or other socially determined circumstances.”²

Health inequity: Preventable and unjust differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations.³

Social determinants of health: Conditions in the environment in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.⁴

Trauma-informed care*: An approach to engaging people with histories of trauma that recognizes the presence of trauma symptoms and acknowledges the role that trauma has played in their lives.⁵

- Other approaches such as healing-centered engagement are beginning to positively reframe trauma by focusing on resilience and collective strength.

**Denotes a key term that only appears in an action step. To view action steps, see the online Wisconsin Cancer Plan 2020-2030 at www.wicancer.org.*

Priority 1

Increase capacity to reduce the burden of cancer for everyone.

Strategies:

- A** Increase the diversity and engagement of the Wisconsin Cancer Collaborative membership and partners.
- B** Increase trust between communities and those working to reduce the burden of cancer.
- C** Establish and maintain a diverse workforce of health professionals and researchers that better represents all Wisconsin communities.

Priority 2

Increase the number of Wisconsinites with access to quality health care.

Strategies:

- A** Increase availability of and access to health services for the under- and uninsured.
- B** Increase availability of and access to comprehensive health insurance coverage.

Priority 3

Increase and prioritize health improvement approaches that engage, center, and benefit populations and communities at highest risk of health-related inequities.

Strategies:

- A** Collect, examine, and disseminate data on traditionally underrepresented populations.
- B** Increase funding opportunities that address health-related inequities.
- C** Increase the co-development of health improvement activities *with and for* populations at highest risk of health-related inequities.
- D** Increase policy and systems-level changes that address the social determinants of health.

Reader's note: To see detailed action steps and data measures for this chapter, please view the interactive Wisconsin Cancer Plan 2020-2030 available online at www.wicancer.org.



Chapter 2

Risk Reduction

Many cancer cases in Wisconsin can be prevented.

While some risk factors such as age or genetic risk cannot be changed, other risk factors such as health behaviors can be modified to lower risk and prevent disease.

The World Health Organization estimates that 30 to 50 percent of all cancer cases are preventable.¹ In the United States, health behaviors such as smoking and excessive alcohol consumption contribute to 42 percent of all cancer cases and 45.1 percent of all cancer deaths.²

In Wisconsin, we can reduce cancer risk significantly by:

- Decreasing tobacco use and exposure.
- Decreasing high-risk alcohol consumption.
- Maintaining a recommended weight through physical activity and healthy diet.
- Increasing protective behaviors from sun and UV exposure.
- Increasing HPV and Hepatitis B vaccine utilization.
- Reducing exposure to radon.
- Commit organizational energy to addressing social determinants of health.

Personal health behaviors are strongly influenced by the environments in which we live, work, learn, and play. Environments that support health are those that include strong clean air laws, limited alcohol outlet density, access to safe green space, access to healthy food that is affordable and culturally appropriate, access to affordable preventive health care services, radon testing in homes and schools, workplace safety protections, and other structural factors that contribute to the personal health behaviors affecting cancer risk.

The Takeaway

Changes to certain health behaviors can reduce cancer cases and prevent cancer deaths significantly. We can reduce risk and prevent cancer by supporting health behavior changes, and by ensuring that every community has the resources needed to support healthy environments.

Together, we can reduce the risk of developing and dying from cancer.

Key Terms

Alcohol outlet density: The number of places where alcoholic beverages are sold (bars, liquor stores, etc.), either per physical area or per population.³

Binge drinking*: A pattern of drinking that brings a person's blood alcohol concentration (BAC) to 0.08 grams percent or above. This typically happens when men consume 5 or more drinks or women consume 4 or more drinks in about two hours.⁴

Built environment: All the physical parts of where we live, work, learn, play, and worship (e.g., homes, schools, buildings, streets, open spaces, and infrastructure). The built environment influences a person's level of physical activity.⁵

Commercial tobacco*: Tobacco that is manufactured by companies for recreational and habitual use in cigarettes, smokeless tobacco, pipe tobacco, cigars, hookahs, and other products. Commercial tobacco is mass-produced and sold for profit. It contains thousands of chemicals and produces over 7,000 chemical compounds when burned, many of which are carcinogenic, cause heart and other diseases, and premature death. This is different from traditional tobacco incorporated into sacred Native American traditions.⁶

E-cigarette*: Battery-powered devices that work by heating a liquid into an aerosol that the user inhales and exhales. These products can be used to deliver nicotine, cannabis (THC and/or CBD), flavorings, chemicals, and other substances. E-cigarettes may be called by different names, such as electronic smoking devices, e-cigs, e-hookahs, vapes, vape pens, tank systems, electronic nicotine delivery systems (ENDS), pod-mods, or mods.⁷

Food desert*: Parts of a community where it is hard to access healthy and affordable food. Food deserts may contribute to disparities in diet and diet-related health outcomes.⁸

Healthy diet: A diet that emphasizes fruits, vegetables, whole grains, and fat-free or low-fat milk and milk products; includes lean animal-based proteins and/or plant-based proteins; is low in saturated fats, trans fats, cholesterol, salt (sodium), and added sugars; and stays within a person's daily calorie needs.⁹

Heavy drinking*: For men, heavy drinking means consuming 15 drinks or more per week. For women, heavy drinking means consuming 8 drinks or more per week.⁴

Hepatitis B: A vaccine-preventable liver infection caused by the hepatitis B virus, which may progress into liver damage and subsequent cancer.¹⁰

Human papillomavirus (HPV): A virus with more than 100 types that can infect the genital areas, mouths, and throats of males and females. HPV causes six types of vaccine-preventable cancer: oropharyngeal (back of the throat, including the base of the tongue and tonsils), cervical, vulvar, vaginal, anal, and penile.¹¹

Obesity: Having a weight that is higher than what is recommended for a given height. Obesity results from a combination of causes and contributing factors, including individual factors and environmental factors such as access to healthy food and opportunities for physical activity, education, and exposure to food marketing.¹²

Radon: A radioactive gas that forms naturally when uranium, thorium, or radium break down in rocks, soil, and groundwater. People can be exposed when they inhale radon-containing air that comes through cracks and gaps in homes, schools, and other buildings. Radon exposure can lead to lung cancer.¹³

Radon mitigation*: Any process or action that is done to reduce radon levels in a building or home.¹⁴

Recommended weight: Body Mass Index (BMI), which is based on a person's height and weight, is an important screening tool for weight categories that are associated with other health problems. If an adult has a BMI within the normal parameters, they are considered to be at a recommended weight.¹⁵

SBI (Screening and Brief Intervention) and e-SBI (Electronic Screening and Brief Intervention)*: The tool providers use to assess patients' drinking patterns; patients who screen positive for excessive drinking are offered a brief, face-to-face intervention that includes information about the risks of excessive drinking, how to change drinking patterns, and referral to treatment if appropriate. This can also be performed using electronic devices (e.g., computers, telephones, or mobile devices).¹⁶



Standard drink*: A standard drink is equal to 14 grams (0.6 ounces) of pure alcohol.⁴ Generally, this amount of pure alcohol is found in:

- 12 ounces of beer (5% alcohol content)
- 8 ounces of malt liquor (7% alcohol content)
- 5 ounces of wine (12% alcohol content)
- 1.5 ounces or a “shot” of 80-proof distilled spirits or liquor (40% alcohol content), e.g., gin, rum, vodka, whiskey

**Denotes a key term that only appears in an action step. To view action steps, see the online Wisconsin Cancer Plan 2020-2030 at www.wicancer.org.*



Priority 1

Decrease tobacco use and exposure to tobacco.

Strategies:

- A** Prevent youth access and initiation of tobacco products.
- B** Protect and strengthen clean air laws.
- C** Increase access to and use of evidence-based tobacco addiction treatment.

Priority 2

Increase physical activity and healthy eating.

Strategies:

- A** Create environments that support physical activity.
- B** Create environments that support healthy eating.
- C** Increase screening for obesity and access to weight management interventions.
- D** Increase awareness of the connection between obesity, lack of physical activity and lack of healthy eating and cancer risk.

Priority 3

Decrease excessive alcohol consumption.

Strategies:

- A** Increase awareness of the connection between alcohol consumption and cancer risk.
- B** Create community environments that prevent and reduce the excessive use of alcohol.
- C** Increase screening and treatment for excessive alcohol use.

Priority 4

Increase cancer prevention vaccine completion.

Strategies:

- A** Increase access to cancer prevention vaccination services.
- B** Increase provider, parent, caregiver, and patient acceptance of cancer prevention vaccines.
- C** Reduce missed clinical opportunities to recommend and administer cancer prevention vaccines.

Priority 5

Decrease exposure to ultraviolet radiation.

Strategies:

- A** Increase opportunities for sun protection in outdoor settings.
- B** Increase awareness about skin cancer prevention.
- C** Decrease indoor tanning use.

Priority 6

Decrease exposure to radon.

Strategies:

- A** Increase awareness of the connection between radon and cancer risk.
- B** Increase the testing for and mitigation of radon in homes and other buildings.
- C** Increase the number of residential buildings built or remodeled using radon reducing methods.

Reader's note: To see detailed action steps and data measures for this chapter, please view the interactive Wisconsin Cancer Plan 2020-2030 available online at www.wicancer.org.



Chapter 3

Early Detection & Screening



Screening for cancer can save lives by finding cancer at earlier stages when it is easier to treat, and by identifying pre-cancers that can be addressed before cancer occurs.

Some patients and families have a higher genetic risk for certain cancers. Genetic counseling and testing can help identify patients who may need increased cancer screening or screening at earlier ages.

Cancer screening recommendations can evolve and develop over time. As of 2020, the US Preventive Services Task Force (USPSTF) recommends screening guidelines for breast, cervical, colorectal, and lung cancers based on current evidence. The Affordable Care Act of 2010 requires that insurers cover these cancer screenings and other preventative services recommended by the USPSTF. Health care providers and patients should determine which cancer screenings are needed based on a patient's individual risk.

The routine use of cancer screenings can dramatically reduce mortality. However, significant disparities must be addressed to ensure equitable cancer screening benefits for all Wisconsinites.

Cancer screening efforts in Wisconsin

As of 2018, Wisconsin screening rates for breast, cervical, and colorectal cancers were around or above national averages¹:

- 67 percent of women ages 45 years and older had an up-to-date mammography.
- 88 percent of women ages 21-65 had received a Pap and/or HPV test.
- 74 percent of women and men ages 50 and older had received a stool test and/or endoscopy (including either flexible sigmoidoscopy or colonoscopy).

Unfortunately, specific populations in Wisconsin experience significant disparities in screening access and completion, by gender, race, sexual orientation and gender identity, insurance coverage, and socioeconomic status. For example, while overall colorectal cancer screening in Wisconsin is on the rise, rates are much lower among African Americans than among whites. Screening occurred more frequently in women and people aged 65 to 75, who were likely insured by Medicare.²

Screening disparities can lead to considerable differences in mortality rates and often are caused by barriers such as:

- Limited clinic hours.
- Transportation access.
- The perceived (or actual) cost of screening, diagnostic, and follow-up care.
- Access to diagnostic and follow-up care.
- Inadequate provider communication or follow-up.
- Biased care.
- Fear of stigma.
- Fear of the financial, emotional, and/or other impacts of a cancer diagnosis.
- Lack of accessible information regarding why screening is important.



The Takeaway

Timely recommended screenings can prevent disease and suffering. We can reduce barriers to ensure all Wisconsinites are able to access and complete the cancer screenings they need.

Together, we can save lives and reduce suffering by detecting cancer at the earliest stage possible.

Key Terms

Genetic counseling: A communication process between a specially trained health professional and a person concerned about their genetic risk of disease. The person's family and personal medical history may be discussed, and counseling may lead to genetic testing.³

Genetic risk: The increased likelihood of developing a disease based on a person's genetic makeup. This may include family history, genetic variations and/or mutations, and behavioral or environmental factors that interacts with genetics.⁴

Genetic testing: The process of analyzing a patient's sample (usually blood or saliva) for changes in the inherited material (DNA which is made up of genes) to determine if there is a predisposition to developing a health condition, such as cancer. Another type of genetic testing is called molecular profiling (using tumor tissue or circulating tumor DNA in the blood) which looks for acquired changes in the tumor DNA to help diagnose cancer, determine treatment, or find out how well treatment is working.⁵

Structural barriers: Non-economic obstacles that make it difficult for people to access cancer screening. These could include barriers such as transportation, hours and locations of services, referral processes, translation services, among other factors.⁶

Priority 1

Increase awareness and demand for recommended cancer screenings.

Strategies:

- A** Develop public awareness campaigns designed to reach communities and populations at greatest need for cancer screening.
- B** Increase the availability of community-driven and peer-to-peer education to increase utilization of recommended cancer screenings.



Priority 2

Implement health care systems-level strategies to increase recommended cancer screenings and diagnostic services.

Strategies:

- A** Encourage health systems to identify or develop quality improvement metrics and processes to improve cancer screening rates and diagnostic services.
- B** Create opportunities and tools for providers and patients to remain up-to-date on current cancer screening recommendations.

Priority 3

Increase access to recommended cancer screenings.

Strategies:

- A** Reduce structural barriers to cancer screening.
- B** Increase insurance coverage for diagnostic testing.
- C** Increase community-clinical linkages to recommended cancer screening services.

Priority 4

Increase utilization of cancer genetic risk assessment and counseling.

Strategies:

- A** Educate providers and patients about assessing genetic cancer risk.
- B** Increase the availability of cancer genetic risk assessments and counseling.
- C** Establish insurance coverage for cancer genetic risk assessment and counseling.

Reader's note: To see detailed action steps and data measures for this chapter, please view the interactive Wisconsin Cancer Plan 2020-2030 available online at www.wicancer.org.

Spotlight on Genetic Counseling

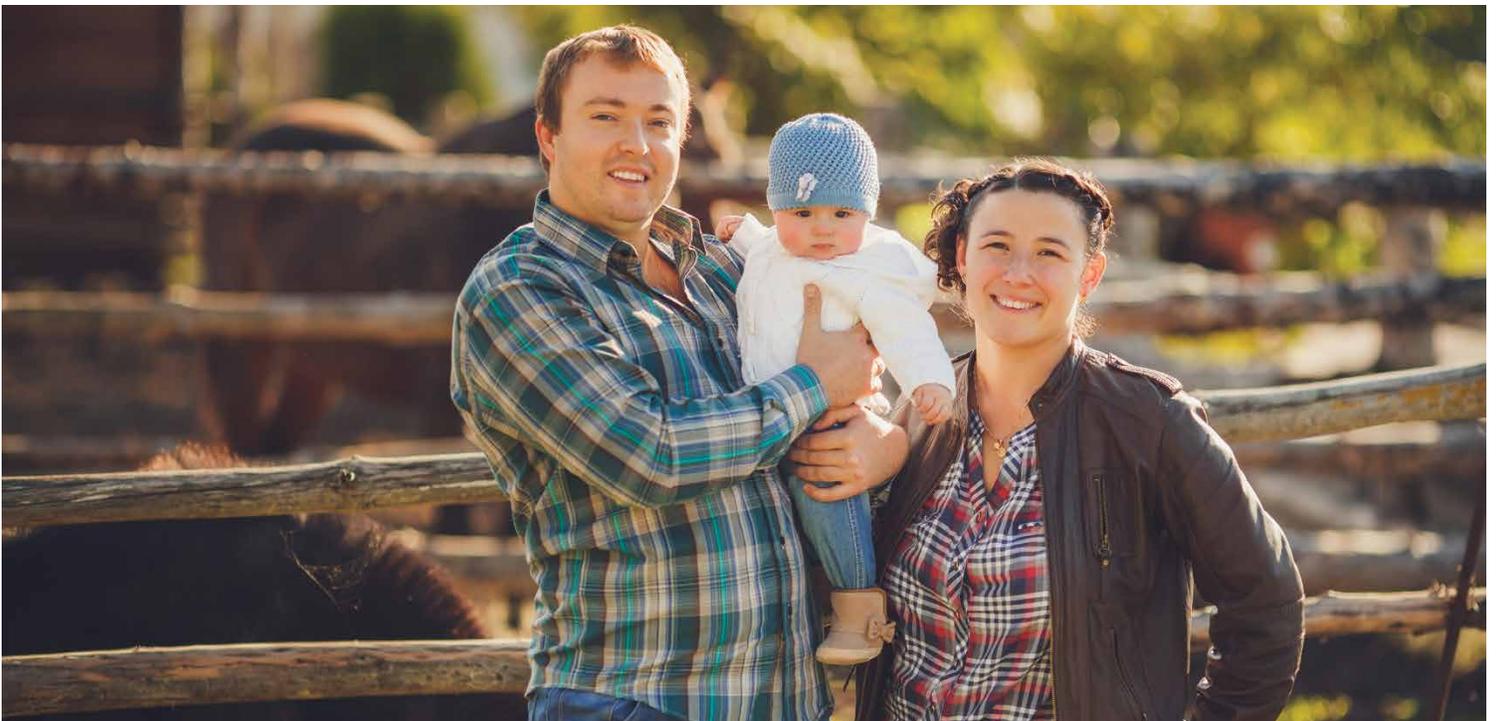
Who benefits from genetic counseling?

Genetic counseling should be accessible to all populations in need of services and genetic testing, including:

- Individuals with a strong family history of cancer.
- Family members of those who have been identified as having a hereditary cancer syndrome.
- Patients with cancer where genetic testing is indicated and may impact their medical management.

Why do genetic counseling and genetic testing matter?

- Knowing if an individual is at a higher risk for cancer may aid the health care professional in offering patient options such as:
 - High-risk screening methods which may lead to earlier identification of cancer.
 - Medications which can be taken to reduce the risk of cancer.
 - Procedures which may prevent cancer.
- Patients, during and after a cancer diagnosis, can discuss with their health care professionals personalized options, which may better identify the best treatment and follow-up care options.
- Individuals and their family members are more informed of their own potential cancer risk to determine risk reduction behaviors, screening utilization, and general quality-of-life decisions such as family planning.



Who should be referred for genetic counseling?

Those with a personal or family history of:

- Early age of cancer onset (typically before age 50).
- Two separate cancer diagnoses (not due to metastasis).
- Having 3 or more close relatives with the same type of cancer or related cancers (breast and ovarian cancer, colon and uterine cancer).
- Pancreatic adenocarcinoma, metastatic breast cancer, prostate cancer, or epithelial ovarian cancer (including fallopian tube or primary peritoneal cancer).
- Presence of other features associated with inherited cancer.
- An individual with 20 or more cumulative colon polyps.
- Ashkenazi Jewish ancestry with personal and/or family history of cancer.
- A relative who has tested positive for a gene mutation.
- Rare or unusual types of cancer such as:
 - Male breast cancer
 - Mesothelioma
 - Paranglioma/pheochromocytoma
 - Medullary thyroid cancer
 - Sarcoma (non-Ewing)
 - Hemangioblastoma (CNS or retinal)
 - Adrenocortical carcinoma
 - Spitz nevus
 - Ovarian sex cord tumor with annular tubules
 - Ovarian small cell carcinoma, hypercalcemic type
 - Sertoli cell tumor of testis or ovary
 - Retinoblastoma
 - Renal cell carcinoma with any of the following specific histology:
 - Papillary type 1 or type 2
 - Collecting duct
 - Tubulopapillary
 - Chromophobe
 - Oncocytoma
 - Oncocytic hybrid

For more guidance, refer to the National Comprehensive Cancer Network and US Preventive Services Task Force for current genetic counseling guidelines.



Chapter 4

Treatment



An estimated 35,280 new cancers will be diagnosed among Wisconsinites in 2020.¹

The majority of these patients will seek active treatment with the goal of curing the disease and/or prolonging life.

While cancer remains a leading cause of death in Wisconsin, advances in treatment are responsible, in part, for the state's growing population of cancer survivors. Put simply, quality and timely cancer treatment can save lives.

Unfortunately, Wisconsinites can face numerous barriers in accessing cancer treatment that is quality, timely, and affordable. These barriers can include but are not limited to: delayed diagnosis, insurance coverage, distance from cancer treatment facilities, and difficulty navigating the complex health care system.

Cancer treatments can take a physical, mental, emotional, social, and financial toll on patients, their caregivers, and support systems. In addition, the cost of treatment can create significant and lasting hardship for survivors and families. In numerous national studies, 48 to 73 percent of cancer survivors reported adverse financial effects resulting from the high costs of cancer treatments.^{2,3}

Fortunately, credible, evidence-based treatment guidelines can be used to reduce variation in the provision of cancer care, thereby improving health outcomes, patient well-being, and the cost-effectiveness of care.

What are common treatment options*?

Surgery: a procedure in which a surgeon removes cancer from the body

Radiation therapy: a type of cancer treatment that uses high doses of radiation to kill cancer cells and shrink tumors

Chemotherapy: a type of cancer treatment that uses drugs to kill rapidly growing cells, including cancer cells

Immunotherapy: a type of cancer treatment that helps boost the body's own immune system to treat cancer

Targeted therapy: a type of cancer treatment that uses unique parts of the cancer cells to kill cancer cells and tumors

Hormone therapy: a treatment that slows or stops the growth of breast and prostate cancers that use hormones to grow

Palliative care: care given in conjunction with other treatment or by itself to maximize the quality of life and comfort of patients who have a serious or life-threatening disease

**People with cancer may have only one treatment or various combinations of treatments, depending on the type, stages, and location of the cancer. There may be other treatments not listed here.*

The Takeaway

Every Wisconsinite deserves access to affordable, timely, quality cancer treatment options. New cancer treatments and research are emerging, offering hope and promise. Further work is necessary to eliminate barriers to treatment and reduce both the financial repercussions and the health side effects that negatively affect cancer survivors and their support systems.

Together, we can increase access to quality cancer care, non-clinical supports, and clinical trials, to reduce death and suffering caused by cancer.

Key Terms

Advance care planning: The process of deciding and sharing a person's preferences about receiving health care if they later become unable to speak for themselves. These preferences are usually stated in documents called advance directives.⁴

Advance directives: Legal documents that states a person's wishes about receiving medical care if that person is no longer able to make medical decisions because of a serious illness or injury. Advance directives also may give a person the authority to make medical decisions for another person when that person can no longer make decisions for themselves.⁵ These documents generally include a health care power of attorney and a living will.

Caregiver: A person who gives care to someone living with a cancer diagnosis. Caregivers may be family members, friends, health professionals, social workers, or members of the clergy. They may give care at home or in a hospital or other health care setting.⁶

Chemotherapy: Treatment that uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping them from dividing. Chemotherapy may be given by mouth, injection (intravenous or otherwise), infusion, or on the skin, depending on the type and stage of the cancer being treated. It may be given alone or with other treatments, such as surgery, radiation therapy, or immunotherapy.⁷

Clinical trials: A type of research study that tests how well new medical approaches work in people. Clinical trials are used to test new methods of screening, prevention, diagnosis, or treatment of a disease. Also called clinical study.⁸

Genetic testing: The process of analyzing a patient's sample (usually blood or saliva) for changes in the inherited material (DNA which is made up of genes) to determine if there is a predisposition to developing a health condition, such as cancer. Another type of genetic testing is called molecular profiling (using tumor tissue or circulating tumor DNA in the blood) which looks for acquired changes in the tumor DNA to help diagnose cancer, determine treatment, or find out how well treatment is working.⁹

Immunotherapy: A type of treatment that uses substances to stimulate the immune system to help the body fight cancer, infection, and other diseases.¹⁰

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 reduce the symptoms of a disease, side effects caused by treatment, and the psychological, social, and spiritual problems related to a disease or its treatment. Also called palliative medicine, comfort care, supportive care, and symptom management. Palliative care can begin at any time during treatment and can occur alongside curative treatment when resources are available.¹¹



Prior authorization*: A decision by a health insurer that a particular health care service, treatment plan, prescription drug, or medical equipment is medically necessary. Sometimes called prior approval or precertification.¹²

Quality of life*: The overall enjoyment of life, including an individual's sense of well-being and ability to carry out various everyday activities.¹³

Support services: Non-medical support, information, and financial resources available to cancer patients and caregivers.¹⁴

**Denotes a key term that only appears in an action step. To view action steps, see the online Wisconsin Cancer Plan 2020-2030 at www.wicancer.org.*



What populations are underrepresented in cancer-related clinical trials?

- All racial and ethnic minority groups
- Sexual and gender minorities
- Persons living in rural areas
- Persons with longer travel distances to receive trial services
- Persons living with low socioeconomic status
- Persons who speak English as their second language
- Persons living with medically complex situations (such as persons living with HIV)
- Older adults
- Populations that require additional research oversight

Priority 1

Increase availability and access to quality cancer care.

Strategies:

- A** Reduce time between diagnosis and treatment.
- B** Increase conversations between patients, families, and providers about treatment options and goals of care.
- C** Increase use of treatment guidelines and quality care standards.
- D** Increase community-clinical linkages to reduce structural barriers to accessing cancer treatment.
- E** Reduce cancer care costs incurred by patients and families.

Priority 2

Increase availability and access to palliative care early and throughout treatment.

Strategies:

- A** Reduce barriers to quality palliative care.
- B** Increase public, patient, and provider awareness of the benefits of introducing palliative care early in treatment.
- C** Increase provider use of palliative care guidelines and quality standards.

Priority 3

Increase patient and caregiver access to non-clinical support services, including care coordination, patient navigation, psychosocial support, and rehabilitation services.

Strategies:

- A** Increase insurance coverage for non-clinical support services for survivors and caregivers.
- B** Increase the availability of non-clinical support services for survivors and caregivers.



Priority 4

Increase participation in clinical trials.

Strategies:

- A** Increase access and availability of cancer clinical trials.
- B** Increase recruitment and inclusion of populations traditionally underrepresented in clinical trials.

Priority 5

Increase the number of advance care planning conversations for all cancer patients early in their treatment.

Strategies:

- A** Increase awareness of the importance of advance care planning.
- B** Improve accessibility of advance care planning documents within and across health systems.
- C** Create health system strategies to routinely assess and review advance care plans throughout the cancer experience, including diagnosis, treatment, survivorship, and end of life.

Reader's note: To see detailed action steps and data measures for this chapter, please view the interactive Wisconsin Cancer Plan 2020-2030 available online at www.wicancer.org.





Chapter 5

Survivorship

More people in Wisconsin, and the nation, are surviving cancer.

In 2019, almost 300,000 Wisconsinites were living with a cancer diagnosis.¹ This number is expected to grow by tens of thousands every year, as advancements occur for early detection and treatment, and as the population grows and ages.

In 2019, 67 percent of US cancer survivors (10.3 million people) had survived five or more years after their diagnosis.² More than 16.9 million Americans with a history of cancer were alive, with many more projected to survive in the near future.³

Cancer survivors regularly report unique challenges, health issues, and quality-of-life concerns long after treatment ends. We can respond to the diverse needs of Wisconsin's growing survivor population by addressing cancer survivorship issues across the cancer care continuum.

How we define “cancer survivorship”

According to the National Cancer Institute (NCI), “an individual is considered a cancer survivor from the time of diagnosis, through the balance of their life.”⁴ Survivors include those with a current diagnosis and those now free from cancer. Caregivers (often called “co-survivors”), family members, and friends are an important part of the survivor experience.

Cancer survivorship refers to “the health and life of a person with a cancer, post-treatment until the end of life.”⁴ Cancer survivorship issues can include:

- The long-term physical, mental, emotional, social, and financial effects of cancer
- The ability to access health care and follow-up treatment
- The transition from active cancer treatment to post-treatment primary care
- The effects of cancer that are late to emerge
- The risk of subsequent cancers
- Quality of life and well-being

The Takeaway

Cancer should be considered a chronic disease with long-term risks, adverse health impacts, and unique quality-of-life concerns that may last throughout a person's lifetime. Special effort should be taken to educate providers about survivorship needs. To reduce the burden of subsequent cancers among survivors, we should focus attention on risk reduction, prevention, and screening strategies within this population.

Key Terms

Cancer survivor: An individual is considered a cancer survivor from the time of diagnosis, through the balance of his or her life.⁴ Survivors include those with a current diagnosis and those now free from cancer.

Caregiver: A person who gives care to someone living with a cancer diagnosis. Caregivers may be family members, friends, health professionals, social workers, or members of the clergy. They may give care at home or in a hospital or other health care setting or from afar.⁵

Co-survivor: The persons who support cancer survivors and who are affected by their diagnosis, including family members, friends, colleagues, and caregivers.

Survivorship care plan*: A detailed plan given to a patient after treatment ends that contains a summary of the patient's treatment, along with recommendations for follow-up care.⁶

**Denotes a key term that only appears in an action step. To view action steps, see the online Wisconsin Cancer Plan 2020-2030 at www.wicancer.org.*

Priority 1

Increase awareness of issues relevant to cancer survivors and caregivers.

Strategies:

- A** Increase collection and dissemination of data identifying the unique needs of cancer survivors and caregivers.
- B** Inform providers and the public of the unique issues relevant to cancer survivors and caregivers.

Priority 2

Increase the implementation of best practices for the transition from active treatment to post-treatment care.

Strategies:

- A** Increase utilization and effectiveness of survivorship care programs.
- B** Establish health systems-level quality improvement metrics and processes to improve transitions from active treatment to post-treatment care.
- C** Increase community-clinical linkages to community support services.



Priority 3

Increase provider, patient, and caregiver awareness of the importance of cancer risk reduction behaviors and cancer screening for cancer survivors.

Strategies:

- A** Tailor cancer risk reduction messages and activities to meet the unique needs of cancer survivors.
- B** Tailor cancer screening messages and activities to meet the unique needs of cancer survivors.

Reader's note: To see detailed action steps and data measures for this chapter, please view the interactive Wisconsin Cancer Plan 2020-2030 available online at www.wicancer.org.





Chapter 6

End of Life



Cancer is a leading cause of death in Wisconsin.

Quality end-of-life care can reduce suffering and is an essential component of cancer care.

Conversations about potential end-of-life concerns should begin at the earliest possible stage after diagnosis. Advance care documents can give patients, providers, caregivers, and family members the opportunity to discuss the patient’s wishes, concerns, and goals of care.

For patients, caregivers, and families, end-of-life concerns can be physical, psychological, social, and spiritual. Additional training may be needed to help medical professionals better understand and respond to these concerns; such training should include strategies to support the emotional and mental health needs of health care providers engaged in end-of-life work.

The Takeaway

Everyone in Wisconsin deserves to approach the end of life with dignity. This can be achieved by increasing access to culturally competent end-of-life care, including palliative medicine and hospice. Likewise, health care providers deserve the training and mental health supports needed to assess and respond to the end-of-life concerns of patients and families.

Together, we can reduce suffering from cancer for patients and their loved ones.

Palliative care and hospice: What is the difference?

	Palliative Care	Hospice
Who can be treated?	Anyone with a serious illness	Anyone with a serious illness whom doctors think has only a short time to live, often less than 6 months
Will the patients’ symptoms be relieved?	Yes, as much as possible	Yes, as much as possible
Can the patient continue to receive treatments to cure my illness?	Yes, if they wish	No, only symptom relief will be provided
Will Medicare pay?	It depends on their benefits and treatment plan	Yes, it pays all hospice charges
Does private insurance pay?	It depends on the plan	It depends on the plan
How long will the patient be cared for?	This depends on what care they need and their insurance plan	If they meet the hospice’s criteria of an illness with a life expectancy of months, not years, and the patient agrees to forgo life-prolonging therapy
Where can the patient receive this care?	<ul style="list-style-type: none"> • Home • Assisted living facility • Nursing home • Hospital 	<ul style="list-style-type: none"> • Home • Assisted living facility • Nursing home • Hospice facility • Hospital

Published with permission of the National Hospice and Palliative Care Organization, all rights reserved.¹

Key Terms

Advance care planning: The process of deciding and sharing a person's preferences about receiving health care if they later become unable to speak for themselves. These preferences are usually documented in documents called advance directives.²

Advance directives: Legal documents that states a person's wishes about receiving medical care if that person is no longer able to make medical decisions because of a serious illness or injury. Advance directives also may give a person the authority to make medical decisions for another person when that person can no longer make decisions for themselves.³

Hospice: A program that gives special care to people who are near the end of life and have stopped treatment to cure or control their disease. Hospice offers physical, emotional, social, and spiritual support for patients and their families. The main goal of hospice care is to control pain and other symptoms of illness, so patients can be as comfortable and alert as possible. It is usually given at home, but may also be given in a hospice center, hospital, or nursing home.⁴

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 reduce the symptoms of a disease, side effects caused by treatment, and the psychological, social, and spiritual problems related to a disease or its treatment. Palliative care can begin at any time during treatment and can occur alongside curative treatment.⁵

Priority 1

Increase availability and access to palliative medicine during end-of-life care.

Strategies:

- A** Reduce barriers to access quality palliative care.
- B** Increase public, patient, and provider awareness of the benefits of palliative care at the end of life.
- C** Increase provider use of palliative care guidelines and quality standards.

Priority 2

Increase access to quality end-of-life care.

Strategies:

- A** Increase cancer patient referrals to and utilization of hospice services.
- B** Decrease the number of cancer patients who die in intensive care units and emergency rooms.





Rina Lee, pictured above, passed away from gastric cancer in 2016. Her husband, Joseph Lee, delivered powerful remarks about caregiving and end-of-life issues at the 2019 Wisconsin Cancer Summit. "Rina loved people. She loved them with a smile, a hug, a laugh, and always with a meal. Her palate was discerning, and she appreciated the flavors of the world. Having gastric cancer made eating in the beginning difficult, and later impossible. Despite this, Rina would still teach me what to put in dishes, what flavors she missed, and sometimes when she talked in her sleep, she would discuss food. I remember her smile whenever I cook."



Chapter 7

Data



To understand the full burden and impact of cancer in Wisconsin, we need reliable, quality data.

Data helps us understand where to allocate our resources, where progress is made, and where we need additional work.

Wisconsin has robust public health data systems, including a Wisconsin population-based cancer registry (the Wisconsin Cancer Reporting System). Unfortunately, some populations within Wisconsin are underrepresented in the data that helps us identify differences in cancer risk and health outcomes. Areas for improvement exist in data collection, use of existing data, and increasing the linkages with other data systems.

Data opportunities in Wisconsin

Data drives the decisions, policies, strategies, and activities that work to collectively improve and prevent cancer outcomes in Wisconsin. To enhance cancer data in Wisconsin, several opportunities exist:

- Establish and maintain data agreements to report all cancer cases from Wisconsinites who receive care in Minnesota (or other nearby states).
- Improve the ability of health care systems to report racial identifiers and other underreported fields to produce more accurate estimations of cancer cases and mortality.
- Increase the number of certified tumor registrars and trained cancer reporters across Wisconsin, to improve timely data collection and dissemination.

The Takeaway

To better understand the impact of cancer in Wisconsin, we need to improve the ongoing, timely, and systematic collection and analysis of cancer and cancer risk data—especially data that reflect the outcomes and health status related to disparately impacted populations.

Key Terms

The Behavioral Risk Factor Surveillance System (BRFSS)*: The nation’s system of health-related telephone surveys that collect state data about United States residents 18 years and older regarding their self-reported “health-related risk behaviors, chronic health conditions and use of preventive services.”¹

Incidence*: The number of new cases of a disease diagnosed each year.²

Mortality: In medicine, this term is used for death rate, or the number of deaths in a certain group of people in a certain period.³

SEER*: The National Cancer Institute’s Surveillance, Epidemiology, and End Results (SEER) Program provides information on cancer statistics in an effort to reduce the cancer burden among the US population.⁴

Wisconsin Cancer Reporting System (WCRS): The Wisconsin population-based cancer registry, which provides direct access to information about cancer incidence and mortality in Wisconsin.⁵

**Denotes a key term that only appears in an action step. To view action steps, see the online Wisconsin Cancer Plan 2020-2030 at www.wicancer.org.*

Priority 1

Promote awareness and use of the Wisconsin Cancer Reporting System's data.

Strategies:

- A** Support the Wisconsin Cancer Reporting System in its mission to provide accurate and timely data.
- B** Promote the use of cancer registry data.

Priority 2

Improve Wisconsin-specific cancer-related data sources.

Strategies:

- A** Improve data collection for existing data sources.
- B** Improve the comprehensiveness of data captured by existing sources.
- C** Improve utilization and timeliness of existing data.

Priority 3

Monitor data related to emerging cancer issues.

Strategies:

- A** Collect data to measure and identify emerging cancer needs in Wisconsin.
- B** Identify and track existing and potential cancer disparities and burdens in Wisconsin.

Reader's note: To see detailed action steps and data measures for this chapter, please view the interactive Wisconsin Cancer Plan 2020-2030 available online at www.wicancer.org.

Evaluation

Tangible Strategies

- Enact ^{patient} advisory council for comp cancer program
- Write a grant for school-based vaccine clinic, advertisement of availability of clinic, staffing & reporting
- Are there payoffs in state to advocate?
- Top recommendation for HEDIS quality measure
- Workup-ass. & health plans-work w/ comp cancer policy team
- data on incidence, screening, and rates by area & disseminate

The Wisconsin Cancer Plan 2020-2030 is guided by measurable and achievable priorities that focus on collaboration and progress.

Targets are based on current trends and will be updated biennially. Updated data will be included in routine reviews shared with partners to measure progress, identify areas for growth, and redirect efforts if needed.

Many of the priorities included in the Wisconsin Cancer Plan 2020-2030 have corresponding data measures and targets. For the priorities that do not, action steps have been established to address the need for identifying, collecting, and reporting data that can be used for future tracking and evaluation.

Sources of data measures and targets include:

American Society of Clinical Oncology (ASCO)
Behavioral Risk Factor Surveillance System (BRFSS)
Centers for Medicare and Medicaid Services (CMS)
Health Information National Trends Survey (HINTS)
Federally Qualified Health Centers (FQHCs)
Survey of the Health of Wisconsin (SHOW)
Wisconsin Cancer Collaborative Commitment Forms

Wisconsin Collaborative for Healthcare Quality (WCHQ)
Wisconsin Department of Health Services
Wisconsin Cancer Reporting System (WCRS)
Wisconsin Immunization Registry (WIR)
Youth Risk Behavior Surveillance System (YRBSS)
Youth Tobacco Survey (YTS)

To see detailed data measures, please view the interactive Wisconsin Cancer Plan 2020-2030 available online at www.wicancer.org.

References

Chapter 1: Equity

1. University of Wisconsin Population Health Institute. (2019). County Health Rankings & Roadmaps 2019. Retrieved from: www.countyhealthrankings.org
2. Centers for Disease Control and Prevention. (2020, March 11). National Centers for Disease Control and Prevention and Health Promotion. Retrieved from Health Equity: <https://www.cdc.gov/chronicdisease/healthequity/index.htm>
3. Centers for Disease Control and Prevention. (2008). Community Health and Program Services (CHAPS): Health Disparities among Racial/Ethnic Populations. Atlanta: U.S. Department of Health and Human Services
4. Centers for Disease Control and Prevention. (2018, January 29). Social Determinants of Health: Know What Affects Health. Retrieved from: <https://www.cdc.gov/socialdeterminants/index.htm>
5. Wisconsin Department of Health. (2020, April 10). Prevention and Healthy Living. Retrieved from Resilient Wisconsin: <https://www.dhs.wisconsin.gov/tic/index.htm>

Chapter 2: Risk Reduction

1. World Health Organization. Cancer Prevention. <https://www.who.int/cancer/prevention/en/>. Updated 2020. Accessed February 12, 2020.
2. Islami F, Goding Sauer A, Miller KD, et al. Proportion and number of cancer cases and deaths attributable to potentially modifiable risk factors in the united states. *CA Cancer J Clin*. 2018;68(1):31-54. doi: 10.3322/caac.21440 [doi].
3. Centers for Disease Control and Prevention. (2017). Guide for Measuring Alcohol Outlet Density. Retrieved from: <https://www.cdc.gov/alcohol/pdfs/CDC-Guide-for-Measuring-Alcohol-Outlet-Density.pdf>
4. Centers for Disease Control and Prevention. (2020, January 15). Alcohol and Public Health. Retrieved from Frequently Asked Questions about Alcohol: <https://www.cdc.gov/alcohol/faqs.htm>
5. Centers for Disease Control and Prevention. (2011, June). Impact of the Built Environment on Health. Retrieved from: <https://www.cdc.gov/nceh/publications/factsheets/impactofthebuiltinenvironmentonhealth.pdf>
6. Keep It Sacred. (n.d.) Commercial Tobacco. Retrieved from <http://keepitsacred.itcmi.org/tobacco-and-tradition/commercial-tobacco/>
7. Centers for Disease Control and Prevention. (2020, February 24). Smoking & Tobacco Use. Retrieved from About Electronic Cigarettes: https://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html
8. Beaulac, J., Kristjansson, E., & Cummins, S. (2009). A Systematic Review of Food Deserts, 1966-2007. *Preventing Chronic Disease*, 6(3). Retrieved from https://www.cdc.gov/pccd/issues/2009/jul/08_0163.htm
9. Centers for Disease Control and Prevention. (2020, March 2). Healthy Eating for a Healthy Weight. Retrieved from Healthy Eating for a Healthy Weight: https://www.cdc.gov/healthyweight/healthy_eating/index.html
10. Centers for Disease Control and Prevention. (2020, March 16). Viral Hepatitis. Retrieved from Hepatitis B: <https://www.cdc.gov/hepatitis/hbv/index.htm>
11. Centers for Disease Control and Prevention. (2019, April 29). Human Papillomavirus (HPV). Retrieved from About HPV: <https://www.cdc.gov/hpv/parents/about-hpv.html>
12. Centers for Disease Control and Prevention. (2020, February 4). Overweight and Obesity. Retrieved from Adult Obesity Causes & Consequences: <https://www.cdc.gov/obesity/adult/causes.html>
13. Centers for Disease Control and Prevention. (2020, January 8). National Center for Environmental Health. Retrieved from Protect Yourself and Your Family from Radon: <https://www.cdc.gov/features/protect-home-radon/index.html>
14. Iowa Cancer Consortium. (2018). Iowa Cancer Plan. Retrieved from: https://canceriowa.org/wp-content/uploads/2019/09/2018-2022_Iowa-Cancer-Plan.pdf
15. Wisconsin Collaborative for Healthcare Quality and the University of Wisconsin Health Innovation Program. Wisconsin Health Disparities Report, 2019. Retrieved from: https://www.wchq.org/pdfs/Disparities_Report_2019_9-20_FINAL.pdf
16. The Community Guide. (2012, August). Alcohol - Excessive Consumption: Electronic Screening and Brief Interventions (e-SBI). Retrieved from <https://www.thecommunityguide.org/findings/alcohol-excessive-consumption-electronic-screening-and-brief-interventions-e-sbi>

Chapter 3: Early Detection and Screening

1. American Cancer Society. (2020). Wisconsin At a Glance. Retrieved from: <https://cancerstatisticscenter.cancer.org/#/state/Wisconsin>
2. Centers for Disease Control and Prevention. (2016). Colorectal Cancer (CRC) Screening in Wisconsin. Retrieved from <https://www.cdc.gov/cancer/ncccp/screening-rates/pdf/colorectal-cancer-screening-wisconsin-508.pdf>
3. National Cancer Institute. (2020, February 28). Cancer Genetics Risk Assessment and Counseling (PDQ®)—Health Professional Version. Retrieved from Genetic Counseling: <https://www.cancer.gov/about-cancer/causes-prevention/genetics/risk-assessment-pdq>
4. National Cancer Institute. (2020, February 28). Genetics. Retrieved from Cancer Genetics Risk Assessment and Counseling (PDQ®)—Health Professional Version: <https://www.cancer.gov/about-cancer/causes-prevention/genetics/risk-assessment-pdq>
5. National Cancer Institute. (2019, March 15). Genetics. Retrieved from Genetic Testing for Inherited Cancer Susceptibility Syndromes: <https://www.cancer.gov/about-cancer/causes-prevention/genetics/genetic-testing-fact-sheet>
6. The Community Guide. (2013, September 25). Community Preventative Services Task Force. Retrieved from: <https://www.thecommunityguide.org/sites/default/files/assets/Cancer-Screening-Reducing-Structural-Barriers.pdf>

Chapter 4: Treatment

1. American Cancer Society. (2020). Wisconsin At a Glance. Retrieved from: <https://cancerstatisticscenter.cancer.org/#/state/Wisconsin>
2. Gordon, L. G., Merollini, K. M., Lowe, A., & Chan, R. J. (2017). A systematic review of financial toxicity among cancer survivors: we can't pay the co-pay. *The Patient-Patient-Centered Outcomes Research*, 10(3), 295-309.
3. Lentz, R., Benson III, A. B., & Kircher, S. (2019). Financial toxicity in cancer care: Prevalence, causes, consequences, and reduction strategies. *Journal of surgical oncology*, 120(1), 85-92.



4. National Institutes of Health. (2018, January 15). National Institute on Aging. Retrieved from Advance Care Planning: Healthcare Directives: <https://www.nia.nih.gov/health/advance-care-planning-healthcare-directives>
5. National Cancer Institute. (2015, March 10). Advance Directives. Retrieved from <https://www.cancer.gov/about-cancer/managing-care/advance-directives>
6. National Cancer Institute. (2020, January 3). Coping with Cancer. Retrieved from Support for Caregivers of Cancer Patients: <https://www.cancer.gov/about-cancer/coping/caregiver-support>
7. National Cancer Institute. (2015, April 29). Chemotherapy to Treat Cancer. Retrieved from <https://www.cancer.gov/about-cancer/treatment/types/chemotherapy>
8. National Cancer Institute. (2020, February 4). Clinical Trials Information. Retrieved from What Are Clinical Trials: <https://www.cancer.gov/about-cancer/treatment/clinical-trials/what-are-trials>
9. National Cancer Institute. (2019, March 15). Genetics. Retrieved from Genetic Testing for Inherited Cancer Susceptibility Syndromes: <https://www.cancer.gov/about-cancer/causes-prevention/genetics/genetic-testing-fact-sheet>
10. National Cancer Institute. (2019, September 24). Types of Cancer Treatment. Retrieved from Immunotherapy to Treat Cancer: <https://www.cancer.gov/about-cancer/treatment/types/immunotherapy>
11. National Cancer Institute. (2017, October 20). Palliative Care in Cancer. Retrieved from <https://www.cancer.gov/about-cancer/advanced-cancer/care-choices/palliative-care-fact-sheet>
12. HealthCare.gov. (n.d.). Preauthorization. Retrieved from <https://www.healthcare.gov/glossary/preauthorization/>
13. National Cancer Institute. (n.d.). NCI Dictionary of Cancer Terms. Retrieved from <https://www.cancer.gov/publications/dictionaries/cancer-terms>
14. National Cancer Institute. (2019, November 8). Support Services. Retrieved from <https://www.cancer.gov/about-cancer/managing-care/services/support>

Chapter 5: Survivorship

1. National Cancer Institute. (2019). State Cancer Profiles: Wisconsin. Retrieved from: <https://statecancerprofiles.cancer.gov/quick-profiles/index.php?statername=wisconsin#t=3>
2. Bluethmann SM, Mariotto AB, Rowland, JH. Anticipating the “Silver Tsunami”: Prevalence Trajectories and Comorbidity Burden among Older Cancer Survivors in the United States. *Cancer Epidemiol Biomarkers Prev.* 2016; 25:1029-1036.
3. Miller, K. D., Nogueira, L., Mariotto, A. B., Rowland, J. H., Yabroff, K. R., Alfano, C. M., ... & Siegel, R. L. (2019). Cancer treatment and survivorship statistics, 2019. *CA Cancer J Clin*, 69(5), 363-385.
4. National Cancer Institute. (2020). Office of Cancer Survivorship. Retrieved from Statistics, Graphs and Definitions: <https://cancercontrol.cancer.gov/ocs/statistics/index.html#definition-survivorship>
5. National Cancer Institute. (2020, January 3). Coping with Cancer. Retrieved from Support for Caregivers of Cancer Patients: <https://www.cancer.gov/about-cancer/coping/caregiver-support>
6. National Cancer Institute. (2019, October 4). Survivorship. Retrieved from Follow-Up Medical Care: <https://www.cancer.gov/about-cancer/coping/survivorship/follow-up-care>

Chapter 6: End of Life

1. National Hospice and Palliative Care Organization. (2017). Some Differences Between Palliative Care and Hospice. Retrieved from <https://www.nia.nih.gov/health/what-are-palliative-care-and-hospice-care> Published with permission of the National Hospice and Palliative Care Organization, all rights reserved. For a more complete chart please see: https://www.nhpco.org/wp-content/uploads/2019/04/PalliativeCare_VS_Hospice.pdf
2. National Institutes of Health. (2018, January 15). National Institute on Aging. Retrieved from Advance Care Planning: Healthcare Directives: <https://www.nia.nih.gov/health/advance-care-planning-healthcare-directives>
3. National Cancer Institute. (2015, March 10). Advance Directives. Retrieved from <https://www.cancer.gov/about-cancer/managing-care/advance-directives>
4. National Cancer Institute. (2018, September 19). Choices for Care When Treatment May Not Be an Option. Retrieved from Hospice Care: <https://www.cancer.gov/about-cancer/advanced-cancer/care-choices#HC>
5. National Cancer Institute. (2017, October 20). Palliative Care in Cancer. Retrieved from <https://www.cancer.gov/about-cancer/advanced-cancer/care-choices/palliative-care-fact-sheet>

Chapter 7: Data

1. Centers for Disease Control and Prevention. (2019, November 5). Behavioral Risk Factor Surveillance System. Retrieved from <https://www.cdc.gov/brfss/index.html>
2. National Cancer Institute. (n.d.). NCI Dictionary of Cancer Terms. Retrieved from <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/incidence>
3. National Cancer Institute. (n.d.). NCI Dictionary of Cancer Terms. Retrieved from <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/mortality>
4. National Cancer Institute. (n.d.). Surveillance, Epidemiology, and End Results Program. Retrieved from <https://seer.cancer.gov/>
5. Wisconsin Cancer Reporting System (WCRS): Wisconsin Department of Health Services. (2019, February 12). Wisconsin Cancer Reporting System. Retrieved from <https://www.dhs.wisconsin.gov/wcrs/index.htm>

**Working together,
we will reduce the
burden of cancer
for everyone
in Wisconsin.**



Wisconsin Cancer Collaborative
370 WARF Building
610 Walnut Street
Madison, WI 53726
www.wicancer.org