

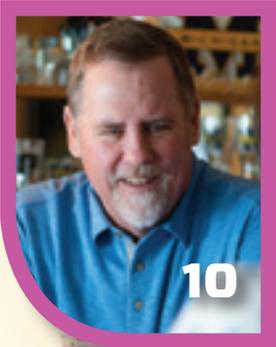
# thrive

## **Laws, Legislation and Guidelines**

How comprehensive cancer centers lead the way to the best care possible



**ROGEL CANCER CENTER**  
MICHIGAN MEDICINE



**On the cover:**  
Megan Heeringa with her dog, Denver, a pet she got during treatment for leukemia who keeps her company as a survivor living with chronic graft-vs.-host disease.

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For more information about the stories in *Thrive* or any other cancer-related information, please call the Cancer AnswerLine at 800-865-1125.

# Getting Political

## How cancer legislation can impact prevention, treatment and cost of care

Cancer might not seem all that political; after all, it is an equal-opportunity illness that can impact anyone no matter their age, race, ethnicity, religion or beliefs. Cancer doesn't care who you voted for or if you voted at all.

So how does cancer tie to politics?

The answer is that cancer researchers, in their search for new information to understand the disease and develop new treatments, discover ways the public can be protected from cancer-causing substances in the environment or best equipped to fight cancer should the need arise.

"Passing statewide policies that help prevent and treat cancer is critical to building healthy communities," explains Lisa Lacasse, president of the American Cancer Society Cancer Action Network. "Through advocacy and public education, we aim to make cancer a top priority for public officials at every level of government."

The ACS CAN has priorities each year based on needs in Michigan and other states. Additionally, researchers across the University of Michigan Rogel Cancer Center advocate for patients of all cancer types at the statewide and national level.

Here are just a few examples of how cancer experts are getting political on behalf of our patients.

### ACS CAN 2020 PRIORITIES FOR MICHIGAN

#### 1. Oral Chemotherapy Fairness

Legislation would ensure patients could take oral chemotherapy if prescribed without paying more out-of-pocket costs than for intravenous chemotherapy.

#### 2. Tobacco 21 Legislation

Since nearly 95% of people begin smoking before the age of 21, federal legislation changed in December 2019, upping the minimum age to buy tobacco products from 18 to 21. ACS CAN remains involved at the state level to fight for effective enforcement of the new law, including taxes applied to all tobacco products, active enforcement by retailers and strong tobacco 21 policies that educate the public and retailers.

### JUST A FEW EXAMPLES OF ROGEL CANCER CENTER EXPERTS GETTING POLITICAL

Renee W. Pinsky, M.D., a breast radiologist, advocated for women in Michigan to be notified if a mammogram shows they have dense breasts. She's also pushed for better education of patients and health providers about the risks associated with dense breasts. She continues work aiming to provide women with personalized and precise screening results, as well as mandating insurance companies cover supplemental screening.

Gary Hammer, M.D., Ph.D., who takes care of people with the ultra-rare adrenal cancer, co-wrote national legislation aiming to provide research and clinical support for those with rare cancers and to develop a program that provided access to centers of excellence for these cancers. As it moves and transforms through the legislative process, he continues work to ensure that patients with rare cancers have access to treatment no matter the distance.



Visit [rogelcancercenter.org/thrive](https://rogelcancercenter.org/thrive) for information on how you can take action.



# Thinking Ahead =

Advanced care planning is important, and not only for cancer patients



Jennifer Griggs, M.D., MPH

For many, a cancer diagnosis may be the first time a person stops to think about what it means to have a serious illness. Before the diagnosis, there was no reason to contemplate end-of-life wishes, let alone put together the legal paperwork to make those wishes official.

Studies show that not being clear about your preferences for medical care can cause stress on both the patient and family members. This is stress that can be avoided.

We sat down with Jennifer Griggs, M.D., MPH, director of the Michigan Oncology Quality Consortium, to understand more about advance care planning, why it is important and what can be gained by making end-of-life decisions well before they are needed.

## Q: Why is it important for people with cancer to know about advance care planning?

It's not just important for people with cancer. It is important for everyone. Any big medical event, such as a cancer diagnosis, is a good time to remember that any and all decisions about your medical care should be made in the context of your personal values and preferences.

Advance care planning is defined as a process that supports adults (at any age or stage of health) in understanding and sharing personal values, life goals and preferences regarding future medical care. The goal is to get the kind of care you want during serious and chronic illness.

This may include choosing and preparing another trusted person to make your medical decisions in the event you cannot.

The key is that advance care planning is exactly that: planning in advance. This gives you a sense of control and a sense of calm.

Another key point is that advance care planning does not bring about the end of your life. There is actually some evidence that creating a plan, talking over your wishes, and communicating your goals and philosophy for living can prolong your life.

My view is that talking about some of the things that can seem frightening actually shines a light into the dark corners. Once we do so, we can see that there is nothing there to scare us. The light brings clarity.

I've had patients who have made all their plans when they feel well—for guardianship of their children, their funeral, who will clean their houses so as not to leave that work for their family—tell me that they have never felt more free.

## Q: Why is advance care planning an ethical issue?

There are many theories to support why advance care planning is about ethics, but it comes down to doctors doing the best job when they treat patients in line with their wishes. It removes the likelihood of undertreatment or overtreatment. And, it's key to remember the fact that abiding by a patient's wishes reduces the burden and conflict for the patient and family members during a difficult time.

Advance care planning can help people maintain independence, alleviate physical suffering and ensure that their religious and spiritual needs are fulfilled.

Only **20%** of patients have an advance directive documenting their wishes. Of those without a directive on file, **60%** were unfamiliar with what it was, **14%** thought they were too young and healthy to need one and **11%** didn't understand the document.

Source: American Medical Association, Feb. 13, 2020

# Peace of Mind



## Q: How can people get started with an advance care plan that's right for them?

The first thing patients can think about is whether they can answer the following question: If you were to get very sick, is there anyone you trust to make medical decisions for you, and have you talked to this person about what is important to you?

It can be difficult to think about, but here is what I advise: Because of illness or accident, most people become unable to make their own medical decisions at some time in their lives. Making decisions for someone else can be very stressful if you don't know their wishes. Talking about it ahead of time gives everyone peace of mind.

## Q: If a patient is ready to put their advance care plan in writing to make it legal, how do they proceed?

In Michigan, we have two kinds of advance directives, the legal documents in your advance care plan. One is the Durable Power of Attorney for Healthcare. The other is a Do-Not-Resuscitate Declaration.

The Durable Power of Attorney for Healthcare names the person you choose to make medical decisions for you, called a proxy or patient advocate. This person should know your health care wishes. Some people use a document called a Living Will to help outline these wishes.

The Do-Not-Resuscitate Declaration is a form to alert your doctors if you do not want to receive CPR or other measures after a cardiac arrest.

Once the forms are complete and signed by you and your patient advocate, you should give copies of your advance care planning forms to your patient advocate and your doctor to keep in your medical record.

## Q: Where can patients find these forms and what if they need help filling them out?

The forms can be found online by typing "advance directive" and your state into a search engine like Google. Michigan Medicine also has forms on its website. We've included a list on this page with websites that are helpful.

If you feel like you need more help to understand the forms or the process, the Rogel Cancer Center social workers can help. Social workers are part of your treatment team and can provide emotional and social support to patients and families.

Patients can also visit the Patient Assistance Center, located on level 1, room 1139 of the Rogel Cancer Center. The PAC is staffed with social workers who specialize in the unique needs of cancer patients.

Visit [rogelcancercenter.org/thrive](http://rogelcancercenter.org/thrive) for the web links to these helpful sites.

- The Patient Assistance Center
- State of Michigan advance directives booklet
- Michigan Medicine advance directives booklet
- National Institute on Aging info on advance directives
- Free advance directive forms by state from AARP



# Survivors and Support

## Young adult leukemia survivors maintain a long-term, supportive friendship

Meet Megan Heeringa, 24, a recent graduate with a master's degree in speech pathology, who now works with senior citizens in Grand Rapids. She has a flair for fashion, enjoys macramé and has a special love for her dog, Denver.



Now meet Natalie Cameron, also 24, a recent graduate with a degree in exercise science from Liberty University in Virginia, who recently moved back home to Oxford, Michigan, to find a job. She has a baby nephew she adores, an interest in fitness and a special aspiration to help people get back their strength after serious illness.



*Natalie Cameron trains her sister, Frances, who recently had a baby.*



*Megan Heeringa loves fashion and works at a local boutique in addition to her job as a speech pathologist.*



### ONLINE EXCLUSIVE:

Visit [rogelcancercenter.org/thrive](http://rogelcancercenter.org/thrive) for links to resources for blood and marrow transplant patients, including adult and young adult patients and their caregivers.

In addition to being active young women in the early stages of adulthood, Heeringa and Cameron have much more in common: as survivors of acute myelogenous leukemia and bone marrow transplant recipients, they live with chronic graft-vs.-host disease as a result of their transplants. They became friends after both being diagnosed their senior year of high school and are a source of support for each other ever since their parents met at the University of Michigan Rogel Cancer Center.

### HIGH SCHOOL LIFE INTERRUPTED

Heeringa was midway through senior year of high school in Grand Rapids and her extreme fatigue seemed justified. She danced competitively on two teams, played violin in the high school orchestra, tutored and nannied on the side, and all while taking advanced classes to prepare for college.

But she began noticing large bruises. She and her mom looked up the symptoms of anemia. It wasn't until a shooting pain beneath her ribs that her parents took her to the emergency room. She was diagnosed with leukemia on Jan. 3, 2013.

"One minute I was trying to decide which college I would be attending in the upcoming fall. The next, we were talking about chemo, bone marrow transplants, losing my hair and living in the hospital for the unforeseeable future," Heeringa says.



## ANOTHER GIRL WITH AML

Cameron’s diagnosis came that spring, a month away from her 18th birthday. Always an athlete, she had switched from gymnastics to figure skating. She took a vacation to Arizona and hiked in the mountains. Eager to finish high school, she already knew she wanted to get her degree in exercise science.

“I’ve always been interested in working with athletes,” she says. “But I also love the idea of doing in-home training for people who are recovering from illness or unable to leave their homes.”

After her AML diagnosis, Cameron spent both her 18th and 19th birthdays in the hospital. She received her high school diploma from a hospital bed.

During recovery from her transplant, she remembers learning there was another girl—exactly her age—on the floor. Their parents had met, but because of strict precautions to prevent infection, Cameron and Heeringa didn’t really get to know each other until later.

“Megan got discharged a little before me,” Cameron says. “She and her mom came to visit and brought me a little Easter basket. It was strange to have two young girls with AML. It’s usually found in men who are older.”



Visit [rogelcancercenter.org/thrive](https://rogelcancercenter.org/thrive) to watch a video about a patient and coach with AML who regained his strength after bone marrow transplant.

## REBUILDING HEALTH AS YOUNG ADULT SURVIVORS

Both young women had long roads to becoming cancer free that included chemotherapy, radiation, relapses and bone marrow transplants. Pediatric bone marrow transplant patients usually stay in the hospital for four to six weeks after the procedure.

“BMT patients are hugely dependent on caregivers while in the hospital. As the body is recovering, we worry about three major complications after transplant: Graft-vs.-host disease (GVHD), infection and relapse,” explains Sung Choi, M.D., a pediatric oncologist at the Rogel Cancer Center.

Graft-vs.-host disease is an important research and clinical problem that Choi and her team have been interested in. GVHD happens when the transplanted bone marrow cells see the patient’s cells and attack them. GVHD affects each patient differently, but can cause high blood sugar, high blood pressure, hormonal issues, bone and joint problems, skin problems and more.

Both Heeringa and Cameron developed chronic GVHD, though some of their symptoms are different. Heeringa has issues with skin rashes and muscular problems requiring occupational therapy. Cameron’s GVHD attacked muscles, resulting in scar tissue. She experienced permanent hair loss. Though the connection is unclear, she required a hip replacement.

“Going from a place of being very strong to a place of being physically weak is very difficult,” Cameron says. “I was just getting back into shape when my chronic GVHD set in. It’s very frustrating.”



*Heeringa at home with her parents and her dog, Denver.*



## THE IMPORTANCE OF SUPPORT SYSTEMS

Bone marrow transplant patients require much support from caregivers, Choi says, and many spend months in the hospital. She was involved in the creation of BMT Roadmap, a tablet-based educational tool for BMT patients and caregivers while in the hospital. She also conducts research on why it's important for caregivers of BMT patients to remain healthy, including ways for them to care for themselves.

"Dr. Choi is an expert in dealing with young adults and GVHD. She also genuinely cares about her patients as whole people. I think the app she created is genius and will help so many going through the transplant process," Heeringa says.

Both young women have found support groups helpful. In Grand Rapids, Heeringa is involved with the AYA Movement of West Michigan, a group for young adult survivors of life-threatening illnesses. Cameron attended and spoke at the GVHD Summit in Chicago last fall. Hearing from others—young and old—living with GVHD was inspiring, she says.

Having each other for support has also been instrumental in moving forward as young adult cancer survivors with chronic

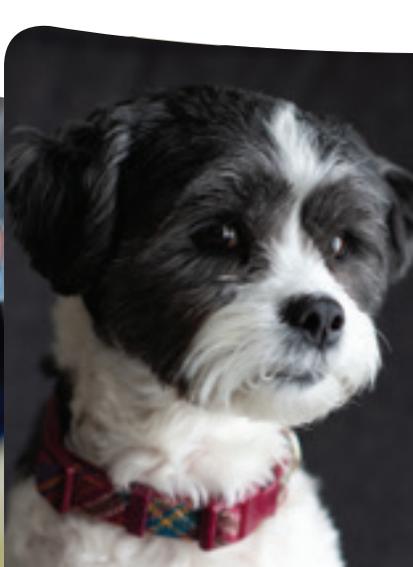
GVHD. "Our timeline from treatment was so similar. We were frequently in the clinic on the same days and facing similar challenges regarding returning to school with busy appointment schedules, trying to get back into fitness and facing significant effects of GVHD," Heeringa says.

They now try to coordinate appointments to catch up and have lunch afterwards.

"When we do get together, we'll joke and laugh about the tests we've gone through on that day," Cameron adds. "We compare notes and what the other is experiencing. We motivate each other and see that we don't have to stop our lives because of GVHD."

Choi says most of the patients she sees in clinic are cancer survivors and years out from their transplants.

"They have survived their cancer and are reintegrating into daily life. Our therapies and antibiotics have gotten better; much of the challenge is learning to manage other medical issues and readjusting their lives," Choi says. 



# Check. Dou

## An after-the-fact second opinion leads to an eventual clean bill of health

### A DELAYED DIAGNOSIS

Dan Szkarlat, 61, walks 13 miles a day on his regular mail route as a postal carrier in Allen Park, Michigan, so dealing with intestinal discomfort and pain was far from ideal. An endoscopy had revealed a small, healing ulcer. His primary care doctor prescribed iron pills for anemia and heartburn medicine, but the symptoms kept returning. He wondered whether he should retire earlier than planned.

After eight months on iron with no significant improvement, he took a vacation up north. His intestinal symptoms left him feeling awful the whole trip. Finally, his doctor ordered a colonoscopy.

Szkarlat's hope for answers quickly turned to concern. The doctor couldn't even complete the test. A large tumor blocked his colon. A CT scan confirmed the mass and identified a lymph node consistent with metastatic colon cancer. Within weeks, Szkarlat was scheduled for surgery at an area hospital, where the mass was removed, along with 33 lymph nodes.

After surgery, he was given a clean bill of health. Even better, he would not need chemotherapy or radiation therapy.

"I was excited and relieved. I planned to go back to work after my six-week recovery," Szkarlat says. "I called my friends and family and told them no chemo. They got it all."

### A LINGERING CONCERN

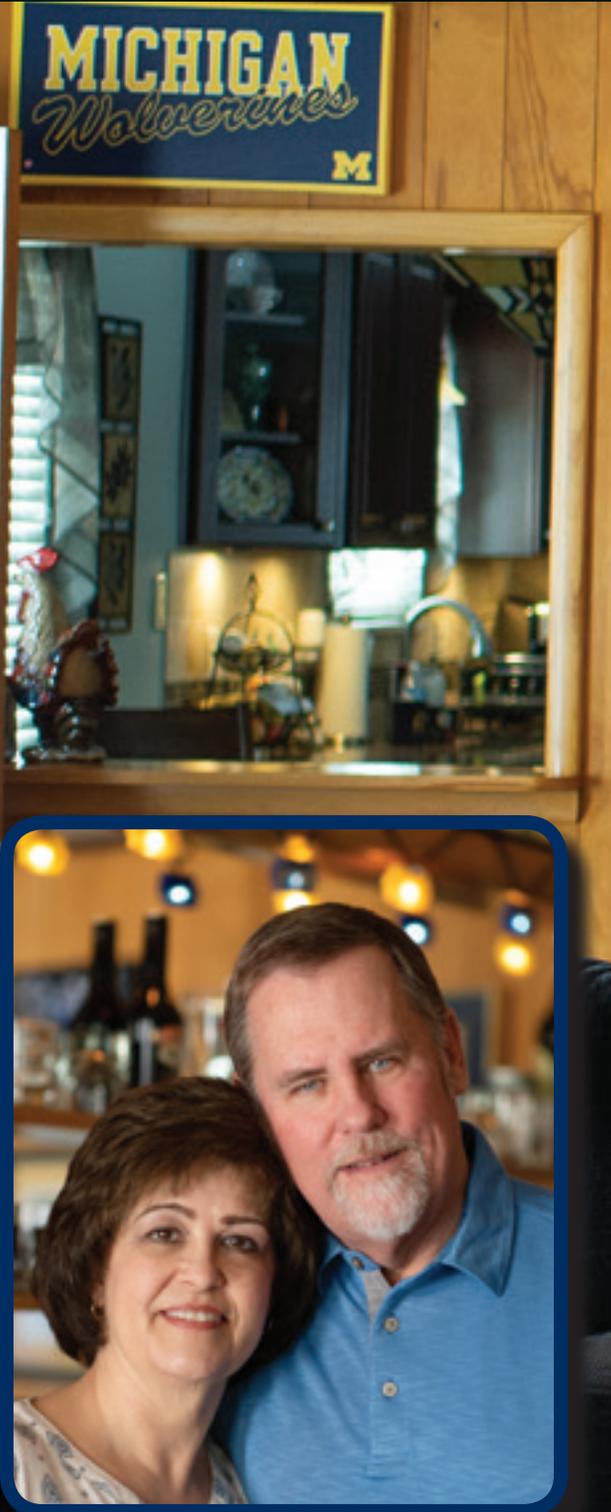
One issue remained: his wife, Sue, who couldn't shake the feeling something was missed. Why did it take so long for her husband to get diagnosed? And how could it be that he needed no follow-up treatment?

As Szkarlat healed from surgery, Sue researched colon cancer treatment. Someone she worked with recommended John Krauss, M.D., director of the Multidisciplinary Colorectal Cancer Clinic at the University of Michigan Rogel Cancer Center.

"I figured it couldn't hurt to get a second opinion," Sue says. "Why not go to one more appointment just to be safe?"

Szkarlat was reluctant. He was told he was cancer free and wanted to believe it. Why get a second opinion now? Sue persisted and they scheduled an appointment.

"Dr. Krauss scheduled a CT scan right away. Sure enough, it found one rather large, cancerous lymph node. I would need another surgery to remove it," Szkarlat says.



# ble Check.



*Szkarlat and Sue were U-M fans before his cancer diagnosis, but are even bigger fans now.*

**ONLINE EXCLUSIVE!**

Visit [rogecancercenter.org/thrive](https://rogecancercenter.org/thrive) for a link to the National Comprehensive Cancer Network guide for colon cancer patients.

## A SECOND TREATMENT PLAN

Krauss says second opinions are an important option any time a patient feels unsure. And, in Szkarlat's case, having his previous and current CT scans reviewed by the multidisciplinary colorectal cancer tumor board at the Rogel Cancer Center radically changed the course of his treatment.

The group of experts restaged Szkarlat's diagnosis from stage 2 to stage 3 colon cancer.

Krauss referred him to colorectal cancer surgeon Hari Nathan, M.D., Ph.D., who pinpointed the exact location of the cancerous lymph node, which required a larger incision and could not be removed laparoscopically.

Following surgery, Szkarlat needed six months of the chemotherapy FOLFOX to destroy any remaining cancer cells in his body.

"Repeat surgery and 12 doses of chemotherapy is a radically different plan than what he was previously told, and so that has to be introduced with care and compassion," Krauss says. "Communication requires giving information and gently probing the patient to make sure they understand why you are recommending the course of action."

## A RETIREMENT PLAN

Side effects from Szkarlat's chemotherapy treatment included tingling fingers and toes, nausea, fatigue, headaches, joint pain and mouth sores. Nonetheless, he worked as much as possible and credits his 13-mile walks with helping him stay busy, distracted and fit.

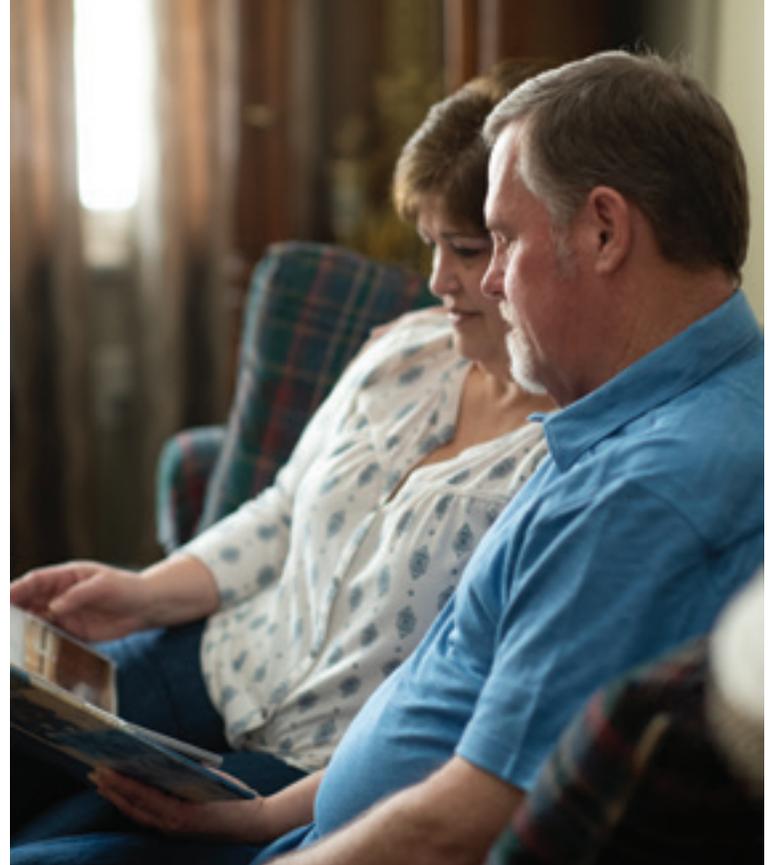
Krauss describes his patient's commitment to working through treatment as "remarkable."

Upon completion of his treatment last November, Szkarlat's final CT scan was free of cancer.

"I tell everyone: God bless my wife. I didn't want to go back to the doctor, but reluctantly did," Szkarlat says. "Dr. Krauss is a doctor that listens to me and listens to my wife. He laid out everything that was going to happen, step by step."

Now, the Szkarlats are back to life as usual. They take meticulous care of their Allen Park home and garden after downsizing and enjoy traveling to visit the two of their three adult children who live out of state.

Szkarlat is planning his official retirement at the end of the summer, after he and Sue attend their son's wedding in Hawaii. 



*The Szkarlats have downsized since their kids are grown, in preparation for retirement.*



Visit [rogelcancercenter.org/thrive](https://rogelcancercenter.org/thrive) to learn more about early detection and prevention of colon cancer, and the Multidisciplinary Colorectal Cancer Clinic.

# Tried and True

## Our dietitians offer 5 best-bet guidelines for a cancer-friendly, healthful diet

BY NANCY BURKE, R.D., DANIELLE KARSIES, M.S., R.D., CSO, AND MELISSA SHANNON-HAGEN, R.D., CSO, U-M ROGEL CANCER CENTER SYMPTOM MANAGEMENT AND SUPPORTIVE CARE PROGRAM

Anyone who likes to read articles about diet and nutrition knows that the topic can get pretty complicated depending on the source and the story. One minute, red wine is good for your heart; the next, all alcohol is bad for you. Sugar is another food with conflicting reports. It seems impossible to keep track of all the information.

When it comes to diet and cancer, the Rogel Cancer Center dietitians help patients simplify. Rather than feeling stressed about choosing the wrong food or drink, remember that moderation is the key. Below are some best-bet guidelines to follow during and after cancer treatment. As for dessert? It's fine, as long as you stick to small portions and eat a balanced diet.

### 1. Use the plate method

This includes paying attention to the food on your plate at every meal. Fill half the plate with fruits and vegetables, one-quarter with lean protein and one-quarter with whole grains. This is the formula for a well-balanced meal.

### 2. In living color

Colorful fruits and vegetables often contain valuable nutrients that can protect against cancer and prevent recurrence. Eating a well-rounded diet by combining a variety of colorful fruits, vegetables and legumes creates a synergistic effect that helps promote good health and lower disease risk.

### 3. Limit red meat and processed meat to 18 ounces per week

Lean meats, such as chicken breast, turkey or fish, are a great way to get the protein your body needs to heal. Some patients try a plant-based diet of mostly fruits, vegetables, whole grains and legumes.

### 4. Cut back on drinking alcohol

Limit alcoholic beverages to one per day for women and two per day for men. Alcohol has been linked to certain cancers; ask your health care team what is best for you based on your diagnosis and treatment plan.

### 5. Try to move every day

A healthful lifestyle is never complete without some physical activity. Start small with activities like walking around the block or dancing to music you enjoy. Aim for 10-minute increments and build from there.



Visit [rogelcancercenter.org/thrive](https://rogelcancercenter.org/thrive) for cancer-friendly recipes.

# Impact Points

## Finding relief from the five categories of cancer-related distress

Dealing with a cancer diagnosis is stressful. No matter if your illness was caught early or is advanced, whether you live close to the hospital or hours away, or whether your treatment plan requires surgery, chemotherapy, radiation or all of the above, hearing the word cancer can change your life in profound ways.

So, what is distress and how is it different from stress? The National Academy of Sciences explains: Stress responses are normal reactions to environmental or internal worries and can be considered adaptive in nature. Distress occurs when stress is severe, prolonged or both.

“Distress from cancer evolves out of so many aspects of diagnosis, treatment and chronic management of the disease,” says Donna Murphy, MSW, director of Patient and Family Support Services at the Rogel Cancer Center. “There are many impact points that can cause concern and worry. Many decisions must be made, such as what to share with loved ones and children or managing the impact of work and income just to name a few.”

The National Comprehensive Cancer Network puts distress into five categories: physical, emotional, practical, family and spiritual/religious. Practical distress includes those real-world issues like rides to and from treatment or managing insurance and other costs.

Murphy emphasizes the importance for patients to not ignore the distress caused by a cancer diagnosis.

“The need to manage distress comes from a person’s yearning to find some balance and routine to regain the feelings of competence and confidence in their daily life. The things that bring us pleasure can still be a source of pleasure with some modifications,” she says.

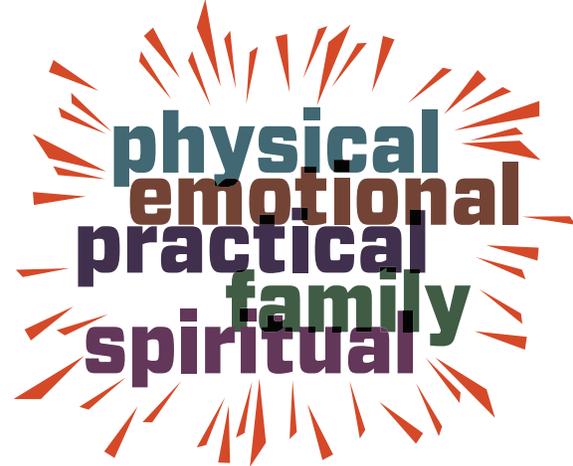
The Rogel Cancer Center offers many free programs and services to regain feelings of normalcy, beauty, joy, hope and even humor, including:

- Art therapy
- Music therapy
- Child and family support
- Guided imagery
- The Patient Assistance Center (for practical matters)

For patients in need of counseling, the PsychOncology program provides therapists who specialize in helping people going through cancer treatment.

Deacon Wayne Charlton, Rogel Cancer Center chaplain, says oftentimes patients face existential questions after a cancer diagnosis. Charlton provides spiritual care support to patients of any and all faiths, including those who don’t practice religion.

“At the most basic level, spiritual care is about the human connection, another person along the journey of life, who can accompany someone through unfamiliar territory long enough to help them regain their bearings and, hopefully, end up knowing, in the deepest part of their being, that everything is going to be OK, no matter what.”



Visit [rogelcancercenter.org/thrive](https://rogelcancercenter.org/thrive) for links to Rogel Cancer Center services to help with distress.

### ONLINE EXCLUSIVE:

See the NCCN Distress Thermometer to measure your distress level.

Find a link at [rogelcancercenter.org/thrive](https://rogelcancercenter.org/thrive)

## ANTI-LEUKEMIA COMPOUND INDUCES COMPLETE REMISSION IN MOUSE MODELS

An anti-cancer compound developed at the Rogel Cancer Center has shown “profound” activity in mouse models against two subtypes of leukemia — representing up to 40% of patients — researchers report in the *Journal of Clinical Investigation*.

The compound, dubbed MI-3454, inhibits the protein-protein interaction between menin and Mixed Lineage Leukemia 1 (MLL1) protein. It induced complete remission in mice transplanted with patient-derived cells containing MLL1 genes with translocations. These genetic rearrangements are found in 5% to 10% of adult acute leukemia patients and in 80% of acute lymphoblastic leukemias in infants.

The compound also led to a significant reduction of lymphoblastic cells in models of leukemia with mutations in the NPM1 gene, which is found in about 30% of acute myeloid leukemia cases.

“New treatments are badly needed,” says Jolanta Grembecka, Ph.D., associate professor of pathology at Michigan Medicine and co-director of the developmental therapeutics program at the U-M Rogel Cancer Center, one of the study’s two senior authors. “Only about one-third of patients with rearrangements of their MLL1 gene survive five years.”

A structurally related compound, KO-539 — discovered by Kura Oncology in collaboration with U-M researchers following a 2014 licensing agreement — is being used in a Phase I, dose-determining clinical trial in acute myeloid leukemia patients. The Rogel Cancer Center is participating in the clinical trial, which began enrolling patients in fall 2019.

“It’s extremely gratifying to see research we began here a decade ago, when I started at U-M as an assistant professor, taking tangible steps toward addressing this unmet medical need for people with leukemia,” Grembecka adds.

Importantly, the compound was well-tolerated by the mice and didn’t interfere with their ability to make new blood cells, the researchers reported.



## BREAST CANCER PATIENTS WITH INHERITED GENETIC MUTATION RECEIVE DIFFERENT CANCER TREATMENT

Women with early stage breast cancer who test positive for an inherited genetic variant aren’t always receiving cancer treatment that follows current guidelines, a new study finds.

An inherited gene can increase risk of developing a second breast cancer.



“Cancer treatment options are increasingly more complex for patients. Patients must consider a myriad of treatment options for the cancer they have and the implications of genetic test results on cancer prevention strategies for themselves and their family members,” says Steven J. Katz, M.D., MPH, senior author of the study led by the University of Michigan Rogel Cancer Center and Stanford University School of Medicine. The results were published in *JAMA Oncology*.

Researchers looked at the characteristics of 20,568 patients’ tumors to assess what the recommended treatment options would be based on standard guidelines. Then they compared actual treatments for women who tested positive for BRCA1 or BRCA2 mutations, which carry the highest risk for additional cancers, those who tested positive for other genes associated with breast cancer, and those whose tests were negative or identified a variant not known to increase breast cancer risk.

They found distinct differences in surgery, radiation and chemotherapy treatments among women who tested positive for an inherited genetic mutation.

- **Surgery:** 66% of BRCA-positive patients underwent double mastectomy, compared to 24% of patients with a negative genetic test.
- **Radiation:** 51% of BRCA-positive patients who were candidates for radiation received it, compared to 82% of patients with a negative genetic test.
- **Chemotherapy:** 38% of BRCA positive patients who were candidates to forgo chemotherapy got it, compared to 30% of patients with a negative genetic test.

The observed relationship of surgical treatment to genetic test results are in line with guidelines supporting double mastectomy as an effective strategy to prevent future cancer risk.

The gaps in radiation were particularly striking as radiation after lumpectomy is considered key to achieving the best outcome with breast conservation.

“We need to understand this gap better, because it could have potential implications on patients’ outcomes,” says Katz, professor of general medicine and of health management and policy at the University of Michigan.

# A Show of Hands

## Clean hands and other tips for keeping viruses at bay

Viruses like the flu and the coronavirus that causes COVID-19 can be particularly dangerous for people with cancer. Older patients, those who have received bone marrow transplants and those receiving chemotherapy are especially at risk of becoming seriously ill since their immune systems are already weakened.

According to the Centers for Disease Control and Prevention, the simple act of washing your hands can prevent around 20% of respiratory illnesses, like COVID-19.

Here are some handwashing quick tips:

- Plain soap is fine – even if it doesn't have extra ingredients that tout “antibacterial” properties.
- If you choose an alcohol-based gel, spray or foam, make sure it's at least 60% alcohol.
  - Make sure your hands are dry before you touch other things.
  - If you have an implanted device, such as an insulin pump, a medication port or a dialysis access, take special care to clean your hands before touching it.

Here are other everyday tips to help prevent the spread of respiratory viruses:

- Avoid touching your eyes, nose and mouth with unwashed hands.
- Avoid close contact with people who are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean and disinfect frequently touched objects and surfaces.
- If it's flu season and your doctor says you're able, get a flu vaccine.



Visit [rogetcancercenter.org/thrive](https://rogetcancercenter.org/thrive) to watch our video, “Wash Your Hands: Fight Germs with the University of Michigan Fight Song.”

### Just a Phone Call Away

Art Therapy  
**877-907-0859**

Cancer AnswerLine  
**800-865-1125**

Cancer Education Program  
**734-647-8626**

Clinical Trials  
**800-865-1125**

Families Facing Cancer  
**877-907-0859**

Fertility Services  
**734-763-4323**

Financial Counseling  
**734-232-2621**

Guided Imagery  
**877-907-0859**

Make a Donation  
**734-764-6777**

Music Therapy  
**877-907-0859**

Nutrition Services  
**877-907-0859**

Patient Assistance Center  
**734-232-2208**

Pharmacy  
**734-647-8911**

Smoking Cessation Counseling  
**734-998-6222**

Social Work  
**734-647-8901**

Spiritual Care  
**877-907-0859**

Symptom Management and Supportive Care  
**877-907-0859**



### THRIVE ONLINE

[rogetcancercenter.org/thrive](https://rogetcancercenter.org/thrive)

*Thrive* doesn't end here! Visit [rogetcancercenter.org/thrive](https://rogetcancercenter.org/thrive) for more. Here's what you'll find:

- A link to the National Comprehensive Cancer Network Distress Thermometer
- Resources to help you start an advance care plan
- Details on early detection and prevention of colon cancer
- Information for blood and marrow transplant patients