

Early Detection & Diagnosis

Goal: Detect cancer in its earliest stage through early detection and a timely, definitive diagnosis.

Research shows that screening for cervical and colorectal cancer at recommended intervals can prevent these diseases by finding lesions/polyps that can be treated before they become cancerous. Screening also helps find cervical, colorectal and breast cancers at an early, most treatable stage. Lung cancer screening is recommended for some people who are at high risk, and men should make an informed decision with their health care provider about prostate cancer screening.

Lung Cancer

Objective 15. Lung Cancer - Increase the percentage of high-risk populations (current and former smokers aged 50-74 years old) who had a discussion with their provider about lung cancer screening.

Performance Measures (KS BRFSS & Kansas Cancer Registry)

1. High risk population screened for lung cancer per USPSTF guidelines
2. Late-stage lung cancer diagnosis (regional + distant)

Baseline:

18.7% (2021)

35.3% (2018)

Target:

30.0%

30.0%

Strategies

1. Assess eligibility for lung cancer screening and include referrals to cessation programs, using a provider checklist as a possible resource.
2. Partner with Kansas Tobacco Quitline to encourage lung cancer screening and promote virtual Kansas Tobacco Cessation Help training.
3. Develop and implement a comprehensive public media campaign to promote lung cancer screening, particularly for African American males in urban areas.
4. Promote the My Life, My Quit cessation resources for adolescents.
5. Develop and provide free professional education with CMEs/CNEs that includes use of low dose CT scans for lung cancer screening and recommended screening guidelines.

Michelle Hills

All you need is a pair of lungs to be at risk—

Before my own lung cancer diagnosis, if someone were to ask me the odds, I would be diagnosed with Stage IV Lung Cancer, I would have guessed something along the lines of one in a million. What I didn't know, along with most, is that those odds are closer to 1 in 16. Lung Cancer is the public health crisis no one is talking about because we have been taught, if you don't smoke, you won't get lung cancer. No one is looking for lung cancer in an otherwise healthy 51-year-old competitive athlete.

During our "annual doctor date" in June 2018, my husband and I met with the Primary Care Physician for a routine physical. In passing my husband mentioned I had a little cough following a sinus infection the month before. We didn't think much of it and came home with a nasal spray and cough "pearls". We were totally unprepared for what unfolded over the summer.

As a never-smoker, the pathway to an accurate diagnosis became a long and difficult one consisting of multiple visits to primary care physicians, allergists and pulmonologists. Each physician had a different diagnosis and a different treatment plan, each with the expectation of resolving a progressively worsening cough.

By August 2018, I couldn't speak a full sentence without heaving coughing spasms. Two chest x-rays revealed an atypical pneumonia and some broken ribs. The doctors were stumped, and I was referred to another specialist in infectious disease. After a dozen appointments with three different physicians, a nurse practitioner ordered a CT scan and directed me to the nearest emergency room. She suspected I had a pulmonary embolism. At this point, I had lost count of the number of suspected diagnoses. I just wanted the cough to go



away. I hadn't slept through the night in months, and it was getting impossible to keep up with the demands of my job as a health care executive.

As we entered the Emergency Department, I wasn't overly worried, thinking I would receive fluids and antibiotics and be on my way home within a few hours. When the physician entered the room, there were a lot of words mentioned, but the only phrase I remember was "abnormal CT scan". With a suspected viral or fungal infection, I was admitted. As the viral studies came back negative over a 24-hour period, the first pulmonologist ordered a scope of my lungs called a bronchoscopy. However, the next day another pulmonologist canceled the procedure and ordered a biopsy for the following morning. The only thing I could think of at the time was, "Gosh, I'm really hungry, when can I eat?" My food had been held for almost 24 hours in anticipation of the bronchoscopy. I was told a biopsy would be the fastest way to identify a rare fungal infection.

My husband asked the hard question: Could this be cancer? It wasn't on the top of anyone's mind. I was a never-smoker, had no family history of lung cancer and my house had a radon remediation system. The doctors were still pursuing a fungal infection diagnosis. Even the interventional radiologist said they didn't think it was cancer and believed I'd aspirated during a coughing fit. I blurted out, "you guys have no idea what you're dealing with." I am from New Jersey so sometimes my verbal filters don't work that well, especially when I am hungry.

After a successful tissue biopsy, I wanted to go home. I was receiving intravenous fluids, antibiotics and an antacid. Nothing was helping and each day I felt worse. I saw no point in remaining in the hospital to just wait for CT results. So, I convinced the hospital team to let me go home and take the medications orally. I threw out the antacid, knowing there was no way I could have acid reflux disease.

Exactly 48-hours later, the phone call came. The pulmonologist said the ominous words, "you have adenocarcinoma, lung type". I wasn't exactly sure what that meant but it didn't sound good. In a way, I was relieved because we were finally getting to the bottom of this horrible cough.

We went to see the pulmonologist a few hours later where he indicated I had lung cancer, probably Stage III. He would organize a referral to an oncologist and recommended a course of chemotherapy. We were in shock. I began to sob. I asked about a second opinion. The pulmonologist was happy to arrange one.

Following a dizzying number of appointments, the news wasn't getting any better: Stage IV lung cancer. The initial biopsy did not reveal any "targetable mutations". Dr. Google was a scary place; with a prognosis of 6-12 months, I didn't see the point of treatment.

Somehow my oncologist got me comfortable with one round of chemotherapy while we waited for comprehensive biomarker testing to be completed by a specialty lab in Boston. Three weeks later, we finally had the correct diagnosis: ALK Positive Non-Small Cell Lung Cancer. This was a game changer. Rather than a course of chemotherapy, I started a targeted therapy where I take six pills a day. What could have been an imminently terminal disease turned out to be a treatable condition. My cough resolved immediately after one dose of therapy and I got the first full night of sleep in four months. Diagnosis is not prognosis.

Trying to put my life back together was equally complicated as I was unprepared for the initial response when sharing my story; the most common reaction by far was "I didn't know you smoked". Decades of public health initiatives have failed the primary care community. Each year over 40,000 people who have never smoked are diagnosed with a late-stage lung cancer.

It took almost four years to find my tribe at The White Ribbon Project. It's a grass root non-profit organization committed to changing the public perception of lung cancer. It is critically important to educate the public that anyone with lung can get lung cancer and no one deserves it.

Tricia Olson



My experience with the “C” word began when I was 20 years old, and my mom was diagnosed with breast cancer at 44. At that time there wasn’t the pink ribbon and all the awareness there is today. In fact, my mother waited a year to get a follow up mammogram due to cost. My mother being a pioneer in her own right tested drugs that are now utilized as regular treatment for HER2+ patients. This was one of her greatest blessings to provide hope and new medication opportunities for others afflicted with breast cancer. Although she passed away after 18 years of fighting and six reoccurrences, she was able to pay it forward for the warriors that are going through their cancer journey now.

I found myself at 45 with the same diagnosis as my mother. However, my story is a little different. I had my yearly mammogram a month before I discovered a lump during a self-examine. After a biopsy it was confirmed to be cancer. Due to this early detection, I was able to catch my cancer in an early stage and begin treating it. This may not have been the story if I didn’t do my self-examine. It is so important to do all your screenings and anything else that is needed to continue to find cancer early. I now have been able to celebrate my five-year cancer-free anniversary. This is something my mother was not able to do during her cancer journey.

Breast Cancer

Objective 16a. Breast Cancer – Decrease late-stage breast cancer diagnosis.

Objective 16b. Breast Cancer Health Equity– Decrease late-stage breast cancer diagnosis among African Americans.

Performance Measures (KS BRFSS & Kansas Cancer Registry)

1. Age-appropriate women who had a discussion with their health care provider about breast cancer screening
2. Mammography screening rates
3. Age-appropriate women in the Medicaid program that are up to date with mammography screenings
4. Late-stage breast cancer diagnosis (regional + distant) (Cases per 100,000)
5. Late-stage breast cancer diagnosis (regional + distant) among African Americans (Cases per 100,000)

Baseline:	Target:
82.8% (2020)	88%
73.4% (2020)	78%
48.7% (Medicaid 2020)	54.7%
41.9 (2018)	34
54.6 (2018)	34

Strategies

1. Coordinate and collaborate with the Kansas Early Detection Works Program to increase screening among low income and uninsured African American women, or who have less than a high school education.
2. Collaborate with programs that use community health workers in African American Communities to help accelerate navigation of low-income, uninsured people into cancer screening.
3. Support and advocate for public policy changes that expand the number of individuals who can access screenings as well as Comprehensive Care following a diagnosis.
4. Increase the proportion of people who discuss interventions to prevent cancer with their providers and had their understanding checked.

5. Work with Kansas managed care providers to increase screening among newly insured or under-insured women.
6. Develop quality improvement activities to increase clinical level screening rates
7. Develop and provide free professional education with CMEs/CNEs to clinicians that includes assessment of patient risk, use of current screening guidelines.
8. Work with KanCare health plans on strategies to increase rates of breast cancer screening.

Julie Stafford

Julie has been a PET/CT Technologist since 2007, which means that her job is looking for cancer. She has a family history of breast cancer, and her family has a history of the genetic mutation of the BRACA 1 gene. Her mother is not a carrier, so she is not either. In May 2015, she gave birth to her third son. While breastfeeding a couple of months later, she found a lump. Due to this being common in breastfeeding mothers, she didn't think much of it but still mentioned it to her doctor in September of the same year. They did an ultrasound. This showed that it was likely not cancerous and that she had one of two options either do a biopsy or do a follow up every six months. Since, she did not want to have anything invasive that could hinder breastfeeding, she elected to follow up in six months. In February 2016, there was another ultrasound performed but the lump had changed enough to look suspicious, and the doctors wanted to do a biopsy. She was still rather hesitant to do a biopsy. She wanted to wait until she was done breastfeeding, there would be a rather hefty insurance copay, and she was certain that it would be negative. She luckily had a very persistent doctors who recommended they do the biopsy. With the support from her husband, she did the test and she tested positive for triple negative breast cancer – an aggressive cancer. She started chemo, had a double mastectomy, a reconstruction, and more chemo. She was 33 when she was diagnosed and had three young children at the time. With her work in the cancer section, she does not share her story often but when she does it is only with patients that it would make a positive impact in their lives, to help them have hope. Julie is happy, healthy and cancer free.

Colorectal Cancer

Objective 17. Colorectal Cancer – Decrease age-adjusted colorectal cancer mortality rate.

Performance Measures (KS BRFSS, Kansas Cancer Registry, Kansas Vital Statistics)

1. Age-adjusted colorectal cancer mortality rate (Cases per 100,000)
2. Adults who are up to date with USPSTF colorectal cancer screening guidelines
3. Late-stage colorectal cancer diagnosis (regional + distant) (KCR cases per 100,000)

Baseline:	Target:
14.5 (2020)	12.0
69.7% (2020)	75.0%
22.5 (2018)	16.0

Strategies

1. Seek funding to provide no-cost CRC screening kits for populations that experience higher rates of colorectal cancer mortality and lower rates of colorectal cancer screening.
2. Provide technical assistance to help providers use their clinic Electronic Health Records systems to document clinic level screening rates.

- Develop and provide free professional education with CMEs/CNEs that includes dissemination of the American Cancer Society Colorectal Cancer Screening Toolkit and strategies for increasing clinic screening rates as part of quality improvement activities). Educational opportunities should be relevant to all members of a health care team including community health workers.

Colorectal Cancer (Average Risk)	Colonoscopy	Every 10 years	45-75
	Flexible sigmoidoscopy	Every 5 years	
	CT Colonoscopy	Every 5 years	
	Guaiac-based fecal occult blood testing (FOBT)	Every year	
	FIT = fecal immunochemical test	Every year	
	FIT-DNA = multi-targeted stool DNA test	Every 1-3 years	

Alice Marshall

In May 2015, my daughter suggested I see a dermatologist about a spot on my forehead. It was diagnosed as pleomorphic t-cell lymphoma. My dermatologist sent me to a lymphoma oncologist at The University of Kansas Cancer Center because this was a rare cancer. My husband suggested I go there since it is a National Cancer Institute Hospital. I completed 15 rounds of radiation, and the lymphoma oncologist ordered a CT. Before I was two blocks away from that appointment, he called my cell phone saying I had a tumor in my colon. He asked when I had my last colonoscopy. I am a "rule follower", so I had mine done at age 50 with "all clear". Dr. Yacoub told me I would have my next colonoscopy before I turned 60.



I then started seeing a GI oncologist (Dr. Al-Rajabi) at KU Cancer Center. He sent me to a GI oncology surgeon (Dr. Al-Kasspooles) Dr. Al-Kasspooles laparoscopically removed a little over a foot of my colon and 39 lymph nodes. My colon had 2 tumors. The largest was golf ball size. 20 of my lymph nodes were cancerous. I did 6 months of chemo but was not able to do all 12 rounds due to low blood counts and extreme difficulty with Oxaliplatin. CTs were every three months, and a spot in my lung that had been 0.4 cm grew to 0.9 cm 10 months after I had completed chemo.

I went to a KU thoracic surgeon who specializes in cancer. (Dr. Veeramachaneni) He removed the top lobe of my left lung and some lymph nodes. The pathology report found the spot to be colon cancer, and my lymph nodes were clear. I had the choice of doing chemo or not, and I chose to go with chemo for another 6 months. This time I did not do Oxaliplatin because my medical team feared it would kill me. My response to that was, "That kind of defeats the purpose of chemo." (Have to have a sense of humor with my team.)

On May 7, 2017, I had completed all 12 rounds of chemo, so I have had 20 rounds total of chemo when combining them all. CTs have been stable since June 2018. Now I am No Evidence of Disease. My team will continue to keep an eye on me with annual visits and labs, and I will let them know if there are symptoms that need to be checked. Dr. Al-Rajabi told me I should have a normal life expectancy.

Both of my children have had colonoscopies because of my history. My husband's parents both died from colon cancer, so it is also on his side of the family. There has not been any colon cancer on my side of the family until now.

Now I am a Colon Cancer Ambassador for Fight Colorectal Cancer. I am extremely grateful for that spot in May 2015, that probably helped to extend my life! Prayers, support, encouragement, and research have helped me with this challenge. I always end my social media cancer updates with Faith, Family, Friends, and Incredible Medical Team!

Prostate Cancer

"While we continue to find the smarter screening methods that are reliable, precise, and cost-effective, we continue to advocate shared decision-making in prostate cancer screening in order to work in our patients' best interests."

Tan, G.H., Nason, G., Ajib, K. et al. Smarter screening for prostate cancer. *World J Urol* 37, 991–999 (2019). <https://doi.org/10.1007/s00345-019-02719-5>

Objective 18. Prostate Cancer- Decrease the age-adjusted prostate cancer mortality rate.

Performance Measures (KS BRFSS, Kansas Cancer Registry, Kansas Vital Statistics)

1. Age-adjusted prostate cancer mortality rates (Cases per 100,000)
2. Discussion about advantages of screening
3. Discussion about disadvantages of screening
4. Late-stage prostate cancer diagnosis (regional + distant) (KCR cases per 100,000)

Baseline:

17.3 (2020)
47.1% (2020)
17.0% (2020)
20.4 (2018)

Target:

15.0
60.0%
25.0%
17.0

Strategies

1. Identify or develop and disseminate small media and social marketing communication campaigns to promote wellness visits that include discussions about prostate cancer screening, particularly for African American men in urban areas.
2. Work with Kansas managed care providers to increase discussions about screening among newly insured or uninsured patients.
3. Develop and provide free professional education with CMEs/CNEs that includes discussions of advantages and disadvantages of prostate cancer screening to determine appropriate screening based on patient medical history/preferences.

Steve Hentzen

During a routine physical, my physician ordered standard tests for a 46-year-old male, including a prostate-specific antigen (PSA) test. I felt fine, but my PSA level was high, which can indicate cancer. After additional tests and consultation with several specialists, I was diagnosed with Stage IIC prostate cancer and had surgery to remove my prostate. My PSA went from 19 to 0.07, but 0.00 is optimal.

We decided against more treatment and to monitor my PSA. A year later, my PSA began to rise, and I opted for eight weeks of "salvage radiation," targeting where the prostate used to be. My PSA went down again, and we continue monitoring every six months. Before my diagnosis I was overweight, smoked and didn't work out. A friend motivated me to get healthy and now I'm fit and feeling great. Typically, guys don't talk about this disease, but it's not healthy to keep it in. I joined a support group, which eventually led to formation of Prostate Network (www.ProstateNetwork.org), a grassroots organization of survivors and partners to raise awareness and spread hope. Much research is being conducted around prostate cancer, and it is our fervent hope that national consensus on screening and treatment guidelines will soon be a reality. Without consensus, it is critical to raise public awareness and for healthcare providers to explore screening options with patients. Early detection and targeted treatment is vital to successfully fighting



this disease. My PSA is still not at 0.00 and there is some fear associated with that, but I channel my emotions into helping others. Through this journey, I've developed true appreciation for life, and I focus on what's important – enjoying every minute of every single day, surrounded by the people who matter most.

Cervical Cancer

The USPSTF recommends screening for cervical cancer:	Women aged 21-29 years old	Every 3 years	With cervical cytology alone
	Women aged 30 to 65 years old	Every 3 years	With cervical cytology alone
		Every 5 years	With high-risk human papillomavirus (hrHPV) testing alone
		Every 5 years	With hrHPV testing in combination with cytology
	Women aged 65 years and older	Can stop testing	

Objective 19. Cervical Cancer - Decrease the age-adjusted cervical cancer mortality rate.

Performance Measures (KS BRFSS, Kansas Cancer Registry, Kansas Vital Statistics)

1. Age-adjusted cervical cancer mortality rate (KCR cases per 100,000)
2. Kansas females who are up to date in cervical cancer screening according to USPSTF Guidelines
3. Late-stage cervical cancer diagnosis (regional + distant) (KCR cases per 100,000 persons)

Baseline:	Target:
2.5 (2020)	1.9
83.9% (2020)	90.0%
4.8 (2018)	3.0

Strategies

1. Partner with the Kansas Early Detection Works Program to increase cervical cancer screening among low income and uninsured women, particularly Hispanic women or those who have less than high school education, or who live in rural/frontier areas.
2. Implement or promote cervical cancer screening and HPV vaccination or referrals as recommended by American Society for Colposcopy and Cervical Pathology.
3. Identify or develop, and disseminate, a social marketing communication campaigns to increase community engagement for cervical cancer screening.
4. Develop quality improvement activities to increase clinical level screening rates.
5. Develop and provide free education about Early Detection Works for Community Health Workers.
6. Develop and provide free professional education with CMEs/CNEs that includes quality improvement activities to increase clinic level cervical cancer screening rates and HPV primary testing. Educational opportunities should be relevant to all members of a health care team including community health workers.