



A QUALITY PROGRAM OF THE AMERICAN COLLEGE OF SURGEONS





Ronnie Sloan, FACHE President The Outer Banks Hospital

President's message

When the Commission on Cancer (CoC) of the American College of Surgeons (ACoS) granted The Outer Banks Hospital (TOBH) cancer program a Three-Year Accreditation with Commendation in 2016, we knew that we had built a solid foundation for cancer care in this community.

Since then, our team has continued to build an excellent program with precision focus on compassionate patient care. We constructed a brand-new radiation therapy center; hired a full-time oncologist, Dr. William Guenther; and added an integrative and lifestyle medicine component to treatment for all our cancer patients. The hard work, dedication, and partnership demonstrated by the entire team were again recognized this past June when TOBH was granted a Three-Year Accreditation with Commendation for the second time in a row.

Accreditation is awarded only to facilities that exceed standard requirements at the time of the survey, and it is considered an elite designation. Our radiation oncologist, Dr. Charles Shelton, brought to light that out of 1,326 critical access hospitals in the U.S., TOBH is one of only 14 with an accredited cancer program.

To say that I am proud of our team's accomplishments is an understatement, especially after reading this year's accreditation report. To make the point, I'll close with a comment from CoC surveyor Patricia Goldblatt, MD, FCAP, FASCP:

"This hospital has only 21 beds and fulfills a dire need of cancer services in this island community. The range of services that they provide is exceptional, and they strive to improve in every way. Considering that this program has been accredited for only four years, their performance in this survey was phenomenal, and the enthusiasm of the staff was contagious."

Critical Access Hospitals in the U.S.





Do we actually have power over cancer?

We all ask ourselves if we're going to be diagnosed with cancer. We hear about a friend or family member who's just been diagnosed, and we wonder if we are next. It's human nature.

The good news is twofold. Modern science is making it easier and more affordable than ever to get a medically advised answer to your questions. What's even more encouraging is that if you are found to have a genetic predisposition to cancer, it does not mean you are doomed to get it.

Research shows that a healthy lifestyle provides protection in the presence of a genetic predisposition to cancer. In cancer genetics, we call this the one-two punch. Add smoking, poor diet, high alcohol intake, and obesity to a genetic predisposition to cancer, and your risk increases. The science is simple — these harmful lifestyle factors damage cells. With a genetic mutation that prevents cell repair, damaged cells are more likely to develop into cancerous tumors.

Knowing your risk and living a healthy lifestyle are the first steps. With active surveillance through early and regular screening, we can have some real power over cancer.

Am I at risk?

As an accredited cancer program, TOBH offers cancer risk assessment, genetic counseling, and testing to identify and educate individuals at risk for hereditary cancer and empower them to make educated, informed decisions about genetic testing, cancer screening, and prevention.

During 2019, we made the necessary investments to offer this service here locally. Before, we were able to offer the service on a referral basis, and where patients needed to travel for consultation.

The first investment that we made was for one of our providers — Dr. Charles Shelton — to become credentialed in genetics counseling. Dr. Shelton completed the rigorous program offered by Stanford University and became credentialed in 2019. This investment allows Dr. Shelton to serve as a genetic counselor for local patients.

Since becoming credentialed, Dr. Shelton has been running a genetics clinic every Friday. The clinic is held at the Radiation Therapy Center in Nags Head.

While the majority of our genetic testing and counseling has been for breast cancer, we have also provided this care for patients potentially at risk for pancreatic, colorectal, prostate, and ovarian cancers.



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OUR POWER



The Outer Banks
Hospital cancer
program has
developed a
comprehensive
high-risk breast
clinic model
focused on
increasing
screening for
BRCA and other
genetic mutations.

What about the dreaded BRCA gene?

While the BRCA gene gets a bad rap among the general public, the gene is actually one that produces proteins that protect against cancer. It's a mutation in this gene that we are looking for. When the BRCA gene is mutated and does not work correctly, cancer can develop. A mutation in this gene has also been linked to ovarian cancer, prostate cancer, pancreatic cancer, and some childhood leukemias.

With a grant provided by the American Association of Community Cancer Centers and Pfizer, The Outer Banks Hospital Cancer Program has developed a comprehensive high-risk breast clinic model focused on increasing screening for BRCA and other genetic mutations.

"We started with a high-risk breast program as our annual clinical goal, because breast cancer is the most common type of cancer in our community. Also, more is known about mitigating risk of breast cancer and treating it successfully. With this model in place, it will be much easier to develop programs for other cancer types," shared Dr. Charles Shelton, The Outer Banks Hospital radiation oncologist and genetic counselor.

The great thing about this program is that access is built into the screening mammogram appointment. Local patients don't have to worry about how to find out if they are at risk for breast cancer. If they have their screening mammogram at The Outer Banks Hospital, they will answer a brief survey as part of their appointment. The survey results are reviewed by our breast program coordinator. Shortly after their screening, patients will receive a letter letting them know if they need to follow up with additional genetic testing based on their survey results.

"When we were developing our screening program, we decided to use the brief survey to screen everyone who has a screening mammogram at our hospital. Since most women come in for their screening mammogram, this is a great way to centralize a process to screen the most people," added Dr. Shelton.

As part of a 2019 Cancer Committee quality study quantifying breast cancer risk, we tested several breast cancer risk tools to see which one was the most reliable and predictive here in our community. After analyzing our data using 70 breast cancer patients diagnosed in prior years, The Outer Banks Hospital selected the Tyrer-Cuzick model because it predicted cancer in 70% of the patients who had been diagnosed.

This analysis also revealed that we have a higher-than-average percentage of familial breast cancers in our community. In similar studies, an average of 25% of patients are shown to have a familial link to their breast cancer. Our local analysis showed that 54% of the breast cancer patients had a familial link.

The brief survey that patients complete during their screening mammogram appointments uses the Tyrer-Cuzick model. Survey results are calculated to categorize patients as being at low, moderate, and high risk.



Since the program began in July, we have identified approximately 90 patients per month who are at an increased risk for breast cancer. These patients are invited to meet with Dr. Shelton to further assess their risk and options for active surveillance and possibly genetic testing. Approximately 20% of our total screening population will meet criteria for genetic testing, and based on our current data, we will find genetic mutations in less than half of those who are tested. Genetic testing most often involves a simple saliva sample and is offered through our high-risk clinic, Outer Banks Women's Care, and other local primary care locations.

What about cancers other than breast?

The Outer Banks Hospital plans to expand the high-risk clinic to include prostate and colorectal cancers in the future.

Advanced practice provider Jennifer Cox, FNP (left), and oncologist William Guenther, MD (right), of The Outer Banks Hospital oncology team review survey data that helps to measure a patient's risk level for breast cancer.

A team that's meant to be

Jennifer Cox, FNP, rarely opened emails that contained job postings. She was satisfied and comfortable in her position as a nurse practitioner with Ballad Health. But one day last May, she did click on one. "That email popped open and lit up my screen," said Cox with a chuckle. The email outlined the new advanced practice provider (APP) position in The Outer Banks Hospital Hematology/ Oncology department. "I had vacationed on the Outer Banks and always wondered how I could make it work full time there."

Fast forward to October 2019 when Cox began her current position as the APP alongside TOBH oncologist Dr. William Guenther. Literally alongside. "We were clearing out our break room for Jennifer's new office when I decided it would be fine to share my office," recalled Guenther.

When is sharing an office a good thing? When the two people agree it's to everyone's advantage. Both Cox and Guenther use their close proximity during the day to share key information. "The day gets busy and when something comes up, it's important not to have to run around to find someone," said Guenther. "Being in the same office makes it easier to collaborate and allows for rapid exchange of information."



"It's important for our patients to know that I have direct access to Dr. Guenther...that I have his ear and his support and that he will offer his input," added Cox. "Sharing an office allows both of us to review information together before one of us steps into the patient's room."

Guenther is grateful for the new APP position and especially that Cox opened that email. "Jennifer fits in perfectly with our office and our culture," he said. "She doesn't get frazzled and deals with issues well. People have really embraced her."

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OVER CANCER



Baseline data reveals that cancer recurrence among our population within a two-year period is 12.5%. To date, none of the 61 patients who participated in the risk-reduction clinic have had a local recurrence or new primary cancer. We will continue to monitor this result.

Aside from knowing my risk, what more can I do to prevent cancer?

Preventing cancer recurrence

The same quality study mentioned previously also revealed a high percentage of cumulative risk factors for patients in the study group. For example, 75% of the breast cancer patients were obese or overweight — a known risk factor for developing breast cancer.

This information led us to conduct a quality improvement program in 2019 designed to reduce modifiable risk factors in patients with breast cancer. The goal of this program is to prevent a second cancer from occurring.

During 2019, all breast cancer patients nearing the end of their treatment were reviewed for modifiable risk factors. Data from the survey using the Tyrer-Cuzick model was collected from all patients. A total of 14 modifiable risk factors were considered, including body mass index (BMI), exercise, diet, alcohol and tobacco use, stress, sleep, spirituality, support system, night shift work, aspirin or NSAID use, calcium and vitamin D monitoring, completion of breast cancer therapy, and use of hormone replacement therapy.

All patients with known modifiable risks were referred to Dr. Christina Bowen, board-certified lifestyle and integrative medicine physician at The Outer Banks Hospital Center for Healthy Living. Dr. Bowen and the lifestyle medicine team at the center educated patients about the potential risk reduction for each and then focused on three risks they believed they could reduce.

For example, BMI reduction by five points lowers the risk of breast cancer by 10%. Exercise reduces the risk of breast cancer 13% to 30%; alcohol consumption reduction by as much as 50%; tobacco cessation 10%, preventative aspirin 21%, use of hormone therapy (e.g., Tamoxifen or aromatase inhibitors) by as much as 50%. Collectively, these are used to reduce the relative risk of recurrence of breast cancer.

We decided to focus on three risk factors per patient based on a three-year historical review of our data that showed that 98% of patients had at least one modifiable risk, with the median number being four. Most common were poor diet (70% of breast cancer patients), BMI elevation (68% of patients over three years), inactivity (48% of patients were sedentary), alcohol use (31% used too much), and tobacco use (18%).

The results are promising. During 2019, 61 breast cancer patients were referred to the Risk Reduction Clinic. Eighty percent (80%) of the patients referred met 100% of their goals, and 100% of the patients met at least one goal. The majority of the risk-reduction goals included increasing exercise, improving diet, and reducing BMI.

OUR POWER OVER CANCER

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Plans are to offer the Risk Reduction Clinic to patients who are identified as high risk but not diagnosed with breast cancer through our screening program, discussed above.

Preventing cancer. Period.

The knowledge that cancer can be prevented, even if one has a genetic predisposition to it, is just too important not to share with the community.

That's why The Outer Banks Hospital held a cancer prevention program for 120 community members in October 2019. The event, titled "Power Over Cancer: Creating an Action Plan to Prevent Breast & Other Cancers," was held to educate the community about reducing the risk of developing cancer.

Dr. Charles Shelton and Dr. Christina Bowen teamed up to present the program and help attendees make a personal plan to reduce modifiable risk factors.

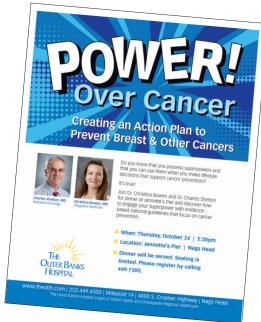
To kick things off, Dr. Bowen shared a very personal story about her mother's battle with breast cancer and how it motivated her to learn more about how to prevent cancer and cancer recurrence.

"The lifestyle choices we make can influence whether or not we get cancer, just as much or more than any other factors. The good news is that each of us has power over cancer. It's deciding to use that power to make a positive difference that matters. Not smoking, limiting alcohol, exercising, and managing weight and stress — these are the key elements of having power over cancer," shared Dr. Bowen.

The American Cancer Society agrees — the most important cancer risk factors that can be changed are smoking, body weight, diet, and physical activity. The World Cancer Research Fund estimates that about 20% of all cancers diagnosed in the U.S. are related to body fat, physical inactivity, excess alcohol consumption, and/or poor nutrition and thus could be prevented.

Although our genes influence our risk of cancer, most of the difference in cancer risk between people is due to factors that are not inherited. Avoiding tobacco products, staying at a healthy weight, staying active throughout life, and eating a healthy diet may greatly reduce a person's lifetime risk of developing or dying from cancer. These same behaviors are also linked with a lower risk of developing heart disease and diabetes.

For more information about reducing your risk for cancer and other preventable disease, contact The Outer Banks Hospital Center for Healthy Living at 449-5978.





On the cover: Dr. Christina Bowen (left), board-certified lifestyle and integrative medicine physician at The Outer Banks Hospital Center for Healthy Living, and Dr. Charles Shelton (right), radiation oncologist at The Outer Banks Hospital Radiation Therapy Center, combine forces to empower people with information about reducing their risk of developing cancer.

With a grateful heart...

Over 15 years, The Outer Banks Hospital Development Council has raised more than \$2 million to support a variety of efforts that help connect our hospital, our patients, and our community. Through fundraising efforts including the annual *Gala* and the *Get Pinked!* and *More Party*, the council funds leading-edge programs and equipment that allow our friends and family to receive the care they need right here on the Outer Banks.

2019 council members

Tess Judge, Chair Cindy Thornsvard, Vice Chair Tim Cafferty, Treasurer Linda Palombo, Nominating Chair Richard Bruce Roberta Graham Kaye Jones Myra Ladd-Bone Rick Loesch Sandy Martin Natalie McIntosh Marie Neilson Teresa Osborne



This past July, the Nags Head Links Ladies presented a check in the amount of \$22,500 to Development Council members for the Get Pinked! Fund at The Outer Banks Hospital. Every penny that they have raised since 2013 has stayed local to address breast cancer in the Outer Banks community.

The Outer Banks Hospital cancer committee

Charles Shelton, MD | TOBH Radiation Oncologist TOBH Cancer Committee Chair

William Guenther, MD | TOBH Medical Oncologist TOBH Cancer Liaison Physician

Vijay Chaudhary, MD | VH Medical Oncologist*

Lysle Ailstock, MD | TOBH Radiologist

George Jordan, DO | Radiologist*

Andrew Ju, MD | BSOM Radiation Oncologist*

Peter Kragel, MD | BSOM Pathologist

Gina Murray, MD | VMC Pathologist*

Christina Bowen, MD | TOBH Integrative Medicine Physician

Daniel Dwyer, MD | OBMG OB/GYN Physician*

Christine Petzing, MD | TOBH Hospitalist

Palliative Medicine Specialist

Aaron Haigh, MD | OBMG General Surgeon

Joseph Jenkins, MD | OBMG General Surgeon*

Devereux Grindle, RN | TOBH Director of Patient Quality

Quality Improvement Coordinator

Stephanie McMahon, RN | TOBH Quality*

Amy Montgomery, MAEd, FACHE | TOBH Senior Administrator

Marcia Bryant, RN | TOBH Vice President, Clinical Operations*

Robin Hearne, RN, MS | TOBH Director of Cancer Services

Cancer Program Administrator

Jennifer Schwartzenberg | TOBH Director Community Outreach Community Outreach Coordinator

Beverly Jones., RN, OCN | TOBH Radiation Therapy Center Cancer Conference Coordinator

Angela Matthews, RN | TOBH Nurse Navigator*

Jamie Rovinelli, CTR | VH Cancer Registry

Cancer Registry Coordinator

Merrill Brinson Bright, CTR | Cancer Registry*

Theresa Smith, RN | TOBH Clinical Research Coordinator

Courtney Williams, RN, OCN | TOBH AMU Nurse Leader*

Jaclyn Hall, RD | TOBH Registered Dietician

Lauren Zaritsky, LCSW | TOBH Psychosocial Services Coordinator

Janet Creef, LCSW | TOBH Social Worker*

Patricia Ledford, RN | TOBH Oncology Nurse

Robin Williams, RN | TOBH Oncology Nurse*

Amy Feltz | TOBH Pharmacist

Vance Collins, Pharm D. | TOBH Pharmacist*

Angie Goetsch OTRL, CLT | TOBH Occupational Therapist

Amy Robinson, PT, CLT | TOBH Physical Therapist

Debra Johnson | TOBH Director of Clinical Support Services, Laboratory

Jan Bennett | American Cancer Society

Ellie Ward, RN | VH Community Education and Outreach Coordinator

Carol Black, LPN | TOBH Oncology Nurse

Marie Neilson | TOBH Patient Navigator

* Designated alternate

