Strength After Breast Cancer program

In 2018, Baylor Scott & White Medical Center – Grapevine’s Cancer Committee in coordination with Baylor Scott & White Institute for Rehabilitation’s Outpatient Physical Therapy Department approved a programmatic goal to implement the Strength After Breast Cancer (SABC) program. The program was initiated at Baylor Scott & White Institute for Rehabilitation – Grapevine in April 2018. The clinic chose SABC based on participant reviews and research/evidence-based data. The initial program ran from April 2018 through December 2018.

SABC is an evidence-based rehabilitation program designed to build strength, reduce side effects of cancer treatment, and improve quality of life for breast cancer survivors. The program was designed by Kathryn H. Schmitz, PhD, and therapists from Good Shepherd Penn Partner, a Philadelphia-based therapy provider. In 2009, Dr. Schmitz performed two research studies that evaluated the effects of exercise in breast cancer survivors. The studies found that there is a 50% reduction in cancer treatment-related side effects when exercise is included in the treatment plan. In addition, the exercise program showed other positive results such as improving a woman’s physical function—such as her ability to work, drive, and perform household, social and recreational activities. The exercise program improved energy levels, improved body image and reduced body fat.

The SABC program begins with an evaluation and education session by a licensed physical or occupational therapist. Participants return weekly for supervised training sessions. The exercise program includes stretching, aerobic training, core strengthening and weight training consistent with the American College of Sports Medicine’s recommendations for exercise. If necessary, modifications to each exercise are made based on participants’ needs. Participants receive a bound notebook with exercise pictures and descriptions as well as exercise logs to monitor progression and progress.

The program at Baylor Scott & White Rehab – Grapevine hosts monthly SABC sessions that are six weeks in duration. Morning and evening sessions are available. Each session accommodates two to three participants. Participants’ feedback from previous sessions reflected improvements in arm range of motion, overall body strength and balance. They also reported improved energy levels, decreased fatigue and an improved sense of well-being without any complications or negative side effects during the exercise program, which supports Dr. Schmitz’s research study results from 2009.

Outcomes measures for the initial program were:
- Shoulder range of motion (ROM)
- Upper extremity (UE) strength
- Performance on the six-minute walk test (6MWT)
- Performance on the 30-second sit to stand test

All participants during all sessions made improvements in all outcomes measures. At the start of the program, ROM averaged a 25% deficit on the affected side. At discharge, all participants were within 5% of the opposite shoulder ROM, indicating a significant improvement. Upper extremity strength measurements at initial evaluation averaged a 4-/5 and at discharge showed an improvement to 5-/5. For the 6MWT, more than 75% of participants performed below age norms for distance covered in six minutes. At discharge, all participants improved by more than 19 meters, indicating a clinically significant improvement, and 10% of participants performed at or above age norms for distance. The 30-second sit to stand test improved on average by two to three additional sit to stands in 30 seconds. Each additional sit to stand is approximately a 10% improvement in performance indicating a 20 – 30% overall improvement. None of the participants had any negative change in circumferential measurement of the arm. The participants who presented at initial evaluation with a history of lymphedema had either no change in measurements or a slight improvement in swelling during the course of the program.

“Participants’ feedback reflected improvements in arm range of motion, overall body strength and balance. They also reported improved energy levels, decreased fatigue and an improved sense of well-being without any complications or negative side effects during the exercise program.”
Take the Shot. Prevent Cancer.

Baylor Scott & White All Saints Medical Center – Fort Worth, Baylor Scott & White Medical Center- Grapevine and Cook Children’s Medical Center’s community collaboration to eradicate HPV and prevent cancer

Human papillomavirus (HPV) is the most common sexually transmitted virus. There are currently 79 million Americans infected with HPV and approximately 14 million people who become newly infected each year. Sadly, every year in the United States, almost 31,000 men and women are diagnosed with more than six forms of cancer caused by an HPV infection. HPV is also responsible for 70 percent of head and neck cancers and 90 percent of cervical cancers. It is predicted that head and neck cancers will surpass cervical cancer as the most common cancer caused by HPV.

Fortunately, cancer-causing strains of HPV are preventable with a routine vaccine. However, the United States’ HPV vaccination rates pale in comparison to other countries. More specifically, Texas is ranked 47th in the nation for vaccination rates. In addition, Texas currently has one of the highest rates of HPV-related cancers with 11.3% of all cancers diagnosed being HPV related. Clearly, more work is warranted to raise awareness about the prevalence and dangers of HPV as well as how to prevent the infection and subsequent cancers.

Obviously, tackling something of this magnitude is complex and demands the attention of community-wide, multilevel healthcare professionals and entities. Baylor Scott & White – Fort Worth, Baylor Scott & White Medical Center- Grapevine and Cook Children’s Medical Center recognized the urgency and are passionate about addressing this potentially deadly epidemic. In April 2018, the two entities joined forces to launch an HPV campaign “Take the Shot. Prevent Cancer.” This multi-tiered educational program targeted three audiences: physicians and healthcare professionals; adults potentially affected by HPV and eligible to receive the HPV vaccine; and parents and guardians of children 11-12 years of age who are eligible to receive the HPV vaccine.

Based on Centers for Disease Control, Commission on Cancer and American Cancer Society guidelines, Cook Children’s and Baylor Scott & White – Fort Worth developed community brochures (see appendix A) and a website, PreventHPV.org, designed to educate the target audiences, debunk myths about HPV, and educate physicians and consumers about Gardasil9®, the HPV vaccine. Additionally, Cook Children’s hosted a Facebook live stream in which two Cook Children’s pediatricians and a radiation oncologist on the medical staff at Baylor Scott & White – Fort Worth spoke candidly about the prevalence, transmission, symptoms and dangers of HPV (see appendix B). They also discussed the HPV vaccine, including some of the myths and misconceptions.

Cook Children’s and Baylor Scott & White – Fort Worth also hosted a professional education program, “Prevent HPV,” which was attended by 49 primary care physicians, internal medicine physicians, obstetricians, gynecologists, dentists, pediatricians and advance practice nurses (see appendix C). Based on the information presented at the program, Baylor Scott & White’s provider group re-examined the process in which they communicated to patients and parents of eligible children about the HPV vaccine and potential risk factors associated with not receiving the HPV vaccine. They expanded the age range, based on CDC recommendations, of potential patients. Physicians reported being better informed on communication strategies and talking points regarding patients’ and parents’ concerns about the HPV vaccine.

To increase community education, Cook Children’s Medical Center, Baylor Scott & White – Fort Worth and Baylor Scott & White – Grapevine developed an education program and oral cancer screening tool. The team collaborated with Texas Christian University to pilot a presentation geared toward educating college students on the prevalence of cancers associated with HPV that are preventable with early intervention, including the HPV vaccine. The team also leveraged the Cook Children’s current program, “Save a Smile,” at Tarrant County College in Northeast Tarrant County to provide education, oral cancer screenings and navigation resources to parents of at-risk children. Based on the location of the
community college, the team was able to expand efforts to include Baylor Scott & White Medical Center – Grapevine’s service area. To date, 11 patients have been screened for oral cancer, with three positive results, and 150 individuals have attended the information sessions.

As a result of the success of the screening and prevention program in calendar year 2018, the goal for 2019 is to increase the number of oral cancer screenings and community education sessions to reach a wider audience of parents of vaccine-eligible children and young adults. Currently, the program is expanding to include programs for higher education, local community centers, health fairs and school districts. Baylor Scott & White – Fort Worth, Baylor Scott & White – Grapevine and Cook Children’s are in the process of developing a toolkit that includes professional education/continuing medical education presentations, community brochures, website development information, and community information session templates that can be easily replicated throughout communities.

Appendix A

Appendix B

Take the Shot. Prevent Cancer.

A conversation about HPV featuring:

Dr. Jason York
Cook Children’s Pediatrics

Dr. Jerry Barker
Baylor Scott & White Radiation Oncologist

Appendix C

PREVENT HPV

Save the date: HPV Symposium

An educational event surrounding the Human Papillomavirus Virus, the HPV vaccine and how it can prevent cancer.

12:30 PM - Dinner joined by Fiesta Restaurant

1:00 PM - Presentation

Thursday, September 13

Baylor Scott & White Medical Center – Fort Worth, Texas 76107

Click here to register

Cook Children’s and Baylor Scott & White All Saints Medical Center – Fort Worth are working together to raise awareness of the importance of the HPV vaccine.
### Cancer Registry

**Diagnosis Year 2016 (CoC)**

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>2016*</th>
<th>2016*</th>
<th>2017**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breast</strong></td>
<td>NA</td>
<td>59.5%</td>
<td>71.7%</td>
</tr>
<tr>
<td>BCS: Breast conservation surgery rate for women with AJCC clinical stage I or II breast cancer (Surveillance Measure)</td>
<td>NA</td>
<td><strong>60.0%</strong></td>
<td><strong>67.3%</strong></td>
</tr>
<tr>
<td>NA: Image or palpation-guided needle biopsy (core or FNA) is performed for the treatment of breast cancer (Quality Improvement Measure)</td>
<td>80.0%</td>
<td>91.5%</td>
<td>90.5%</td>
</tr>
<tr>
<td>HT: Adjunct Hormonal Therapy: Tamoxifen or third generation aromatase inhibitor is considered or administered within 1 year (365 days) of diagnosis for women with AJCC T1N0M0, or Stage II or III hormone receptor positive breast cancer (Accountability Measure)</td>
<td>90.3%</td>
<td>91.4%</td>
<td>98.9%</td>
</tr>
<tr>
<td>MASTRT: Radiation therapy is considered or administered following any mastectomy within 1 year (365 days) of diagnosis for women with ≥ 4 positive lymph nodes (Accountability Measure)</td>
<td>90.0%</td>
<td>76.0%</td>
<td>83.6%</td>
</tr>
<tr>
<td>BCPRST: Post Breast Conserving Surgery irradiation: Radiation therapy is administered within 1 year (365 days) of diagnosis for women under age 70 and receiving breast conserving surgery for breast cancer (Accountability Measure)</td>
<td>90.0%</td>
<td>82.8%</td>
<td>88.8%</td>
</tr>
<tr>
<td>MAC: Adjunct Chemotherapy: Combination chemotherapy is considered or administered within 4 months (120 days) of diagnosis for women under age 70 with AJCC T1N1M0, or Stage III or IV hormone receptor negative breast cancer (Accountability Measure)</td>
<td>NA</td>
<td>87.9%</td>
<td>91.7%</td>
</tr>
<tr>
<td><strong>Colon</strong></td>
<td>NA</td>
<td>82.3%</td>
<td>88.0%</td>
</tr>
<tr>
<td>ACT: Adjunct Chemotherapy: Adjunct chemotherapy is considered or administered within 4 months (120 days) of diagnosis to patients under age 80 with AJCC II (lymph node positive) colon cancer (Accountability Measure)</td>
<td>NA</td>
<td>82.3%</td>
<td>88.0%</td>
</tr>
<tr>
<td>SRL: Surgical Resection Includes at least 12 Lymph Nodes: At least 12 regional lymph nodes are removed and pathologically examined for resected colon cancer (Quality Improvement)</td>
<td>85.3%</td>
<td>89.9%</td>
<td>90.3%</td>
</tr>
<tr>
<td><strong>Rectal</strong></td>
<td>NA</td>
<td>83.9%</td>
<td>87.1%</td>
</tr>
<tr>
<td>RECRECT: Pre-operative chemoradiotherapy is administered to patients with AJCC T3N0, T4N0, or Stage III; or postoperative chemo and radiation are administered within 80 days of diagnosis for clinical AJCC T1-2N0M0 with pathologic AJCC T3N0, T4N0, or Stage III; or treatment is considered for patients under the age of 80 receiving radiation for rectal cancer (Quality Improvement)</td>
<td>85.3%</td>
<td>83.9%</td>
<td>87.1%</td>
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<tr>
<td><strong>Gastric</strong></td>
<td>NA</td>
<td>70.3%</td>
<td>50.8%</td>
</tr>
<tr>
<td>GISL: At least 15 regional lymph nodes are removed and pathologically examined for resected gastric cancer (Quality Improvement)</td>
<td>80.0%</td>
<td>70.3%</td>
<td>50.8%</td>
</tr>
<tr>
<td><strong>Ovary</strong></td>
<td>NA</td>
<td>59.0%</td>
<td>55.2%</td>
</tr>
<tr>
<td>OVSAL: Salpingo-oophorectomy with omentectomy, debulking, cytoreductive surgery, or pelvic exenteration in Stages I-IV ovarian cancer (Surveillance Measure)</td>
<td>NA</td>
<td>59.0%</td>
<td>55.2%</td>
</tr>
</tbody>
</table>

**Non-Small Cell Lung**

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>2016*</th>
<th>2016*</th>
<th>2017**</th>
</tr>
</thead>
<tbody>
<tr>
<td>10RLN: At least 10 regional lymph nodes are removed and pathologically examined for a 2CC Stage I, II, IIIa, and IIIb resected NSCLC (Surveillance Measure)</td>
<td>NA</td>
<td>49.0%</td>
<td>38.7%</td>
</tr>
<tr>
<td>UnOsdg: Surgery is not first course of treatment for ch2, M0 cases (Quality Improvement)</td>
<td>85.3%</td>
<td>93.0%</td>
<td>94.3%</td>
</tr>
<tr>
<td>LCT: Systemic chemotherapy is considered or administered within 4 months of the day pre-operative or day of surgery to 6 months postoperatively or surgically resected cases with pathologic lymph node positive (pN2) NSCLC (Quality Improvement)</td>
<td>85.3%</td>
<td>84.1%</td>
<td>90.3%</td>
</tr>
</tbody>
</table>

**Cervix**

- CBIRR: Use of brachytherapy in patients treated with primary radiation with curative intent in any stage of cervical cancer (Surveillance Measure)
- CBIRR: Radiation therapy completed within 60 days of initiation of radiation among women diagnosed with any stage of cervical cancer (Surveillance Measure)
- CBIRCT: Chemotherapy administered to cervical cancer patients who received radiation for Stages IB2-IV cancer (Group 1) or with positive pelvic nodes, positive surgical margin, and/or positive parametrium (Group 2) (Surveillance Measure)

**Endometrium**

- ENDLR: Endoscopic, laparoscopic, or robotic performed for all endometrial cancer (excluding seroma and lymphoma), for all stages except Stage IV (Surveillance Measure)
- ENDCRT: Chemotherapy and/or radiation administered to patients with Stage IIC or IV endometrial cancer (Surveillance Measure)

**Bladder**

- BL2RLN: At least 2 lymph nodes are removed in patients under 80 undergoing partial or radical cystectomy (Surveillance Measure)
- ABLCMRT: Radical or partial cystectomy; or tri-modality therapy (local tumor destruction/excision with chemotherapy and radiation) for clinical T2N0M0 patients with urothelial carcinoma of the bladder, first treatment within 90 days of diagnosis (Surveillance Measure)
- BLCT: Neo-adjuvant or adjuvant chemotherapy recommended or administered for patients with muscle invasive cancer undergoing radical cystectomy (Surveillance Measure)

**Kidney**

- POSL: At least 1 regional lymph node is removed and pathologically examined for primarily resected unilateral nephroblastoma (Surveillance Measure)

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*Data results released from the National Cancer Data Base of 12/5/18.

**Data in pending results by the Rapid Quality Reporting Process via the National Cancer Data Base.**