


NETWORK



A Big Smile for a Small Miracle

**Amazing Innovations
and Discoveries**

 **SENTARA**
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**PLANS UNVEILED FOR
SENTARA HEART
HOSPITAL**

NETWORK

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This edition of Network is dedicated to innovations, advancements and breakthrough discoveries that are making possible ever more effective prevention and treatment of disease.

You can find many Network stories on the Web – at www.sentara.com/network – also look for links at the bottom of select stories.

On the cover: Sandra White, the first patient to undergo the region's first drug-eluting stent implant at Sentara Norfolk General Hospital.

DAVID L. BERND
Chief Executive Officer

VICKY G. GRAY
Vice President of
System Development

LISA P. SCHULWOLF
Executive Editor

Speak Up

NETWORK welcomes ideas from our employees and affiliates. Don't limit your suggestions to full-blown stories. Got a quote to share? Something going on in your division? Let us know by contacting:

Lisa Schulwolf
c/o Corporate Communications
6015 Poplar Hall Drive
Suite 101
Norfolk, VA 23502
(757) 455-7579
FAX (757) 455-7964
Or e-mail lpeschulw@sentara.com

All accepted submissions are subject to editing and space limitations. For mailing questions, call: (757) 455-7540.

NETWORK is published quarterly by Sentara to recognize – and celebrate – our employees and affiliates, our patients, other customers and our system as we work together to create a healthier community.

This is an exciting time for our industry, and specifically, for all of us here at Sentara Healthcare. Innovations, advancements and breakthrough discoveries are making it possible for more effective prevention and treatment of disease. One medical innovation first offered in Hampton Roads at Sentara Virginia Beach General Hospital is Intensity Modulated Radiation Therapy (IMRT) for cancer treatments. IMRT matches the radiation dose being given to the shape and location of a tumor, thus avoiding damage to the surrounding tissue. With IMRT, radiation oncologists can safely deliver higher radiation



A MESSAGE FROM DAVE BERND

doses than previously possible to improve outcomes and reduce side effects. IMRT has shown dramatic cure rates in select cancer treatment centers and is most beneficial in treating prostate, brain and head and neck cancers. The treatment is now also available at SCH and SNGH. Throughout this issue you will read about innovations like IMRT at SVBGH, as well as others throughout Sentara. We are proud to introduce many of these impressive strides as we continue to serve our mission of improving the health of the communities we serve.

FOUNDATION UPDATE

Building on its quiet tradition of accepting charitable gifts from individuals, businesses, foundations and partners in the community, Sentara Health Foundation recently began a program to increase visibility in the community. Here are a few examples from around the system.

Children Helped on the Peninsula

Alysha and E. J. Madison had their lives changed dramatically in February 2003 when their mother arrived at the Port Warwick Emergency Department in distress and Tamera Barnes, MD, agreed to take them home for the weekend. Latasha Madison needed to be in intensive care but did not want Child Protective Services to take the children. CPS officials let the children stay with Barnes until their grandmother arrived from California.

Though Mrs. Madison died a short time later, the children felt cared for during a difficult time. The Hampton Roads community mirrored that generous spirit with an outpouring of prayers and monetary donations. Sentara Health Foundation accepted more than 20 donations totaling more than \$1,400 to help the family. SHF used the money to fund one month's rent and sent gift cards from Target and Wal-Mart so the children could buy new clothes, bedding and other items to begin their new lives in California with their grandmother.

Employees Put Their Hearts First

Myrtle Saunders grew up in South Norfolk, a devoted member of Raleigh Heights Baptist Church and a great-grandmother. For 19 years she lived across the street from Kathleen Ehert, a nurse in the Same Day Surgery unit at Sentara Leigh Hospital. Ehert felt lucky to have Saunders as a neighbor.

When Saunders became ill with cancer, the Sentara Hospice staff and volunteers became as fond of her as those who had known her for years. In 2001, the nurses in the Same Day Surgery Unit and Recovery Unit where Ehert worked wanted to honor Saunders by making donations to the Sentara Hospice program. By the time she finally succumbed to cancer in February 2002, more than 40 gifts were made to Sentara Hospice in honor and in memory of Saunders.

Family Dedicates Chapel

When Good Shepherd Chapel was dedicated at Sentara Nursing Center - Hampton in June, the family of the late Col. James H. Vaughan Jr. created a legacy of faith and family.

In 1999, Vaughan became a resident at Sentara Nursing Center-Hampton, and soon after, his daughters identified a need at the facility and proposed an idea to nursing home administrators to create a chapel.

Col. Vaughan died in October 2002, but his daughters worked with nursing home administration to bring the chapel to fruition. The Vaughans recalled that while in a foxhole in World War II, the Bible passage that offered the most comfort to their father had been the 23rd Psalm. Thus the family selected the name "Good Shepherd Chapel."

The Vaughan family donated funds through Sentara Health Foundation for building the chapel and creation of an endowment to be used toward the future maintenance of this sacred space.

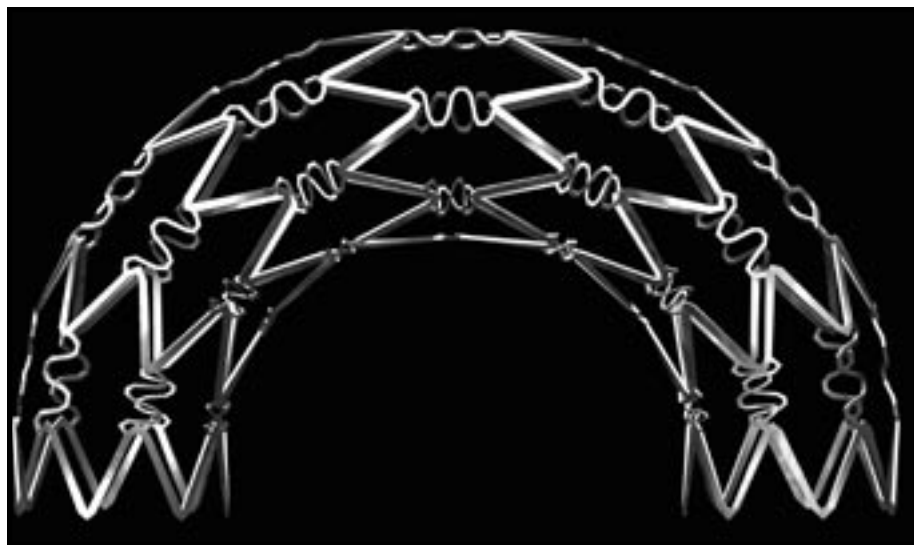
If you have a friend or patient who would like to contribute, simply direct them to the volunteer office at any Sentara hospital for a donation envelope, or call Lisa Sands at 455-7220.

Innovative Tools and Techniques Give Sentara the (Leading) Edge

Embracing new trends, techniques and the very latest technologies is critical to becoming – and remaining – a leader in the world of healthcare. Because each discovery and innovation means improvement over former methods, offering more effective treatment, fresh hope and quicker healing for a rapidly growing patient population.



A large number of these exciting innovations have come on line recently, affecting just about every area of medicine. This edition of Network is dedicated to celebrating these advancements and the improved quality of life they mean for today's patients.



Sentara Implants Region's First Drug-Eluting Stent.

Sentara Norfolk General Hospital and Sentara Virginia Beach General Hospital were the first hospitals in the region to implant drug-eluting stents. Cardiologists at SNGH and SVBGH are currently evaluating patients in order to offer this device to other qualifying candidates.

"We are thrilled to offer Sentara's heart patients the hope of this new technology, which represents the promise of eliminating coronary artery reblockage," says Lynn Holder, vice president of Sentara Cardiac, Vascular and Transplant Services.

Approved by the U.S. Food and Drug Administration (FDA), it is

the first combination drug device intended to help reduce reblockage of a treated artery, one of the biggest challenges in long-term treatment of patients requiring interventional cardiology. The drug-eluting stent has

been labeled a breakthrough in stent technology (which was introduced in the 1990s). Sentara's cardiac program is leading the way in adopting this new, minimally invasive and clinically proven technology.



Sandy White had her stent surgery on April 25, and when Network spoke with her in early June, she reported feeling "just great." She was not the least bit tentative about being the first to have this procedure – quite the contrary, she felt "privileged and blessed" to benefit from this pioneering technique that enabled her to avoid multiple bypass surgery. An animal lover and recreational swimmer, this former chiropractic assistant looks forward to returning to the things she loves – playing with her dog and cat, gardening, and taking Florida vacations during which she swims and snorkels with dolphins and manatees.

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Sentara is First in Nation to Participate in FDA Trial.

Sentara Norfolk General Hospital was the first of six sites in the United States to begin an FDA trial using the ZEUS[®] robotically assisted laparoscopic radical prostatectomy procedure to treat prostate cancer. Michael Fabrizio, MD, performed the area's first ZEUS-assisted laparoscopic radical prostatectomy, a minimally invasive technique to treat prostate cancer that utilizes very tiny multiple incisions. The trial started in March, finished in May and involved up to 15 Hampton

Roads patients. Following FDA approval, U.S. surgeons would be cleared to use ZEUS[®] to perform laparoscopic radical prostatectomy and other urology procedures. The other hospitals participating in the trial include: The Johns Hopkins Hospital, Cedars-Sinai Medical Center, UCLA Medical Center, Massachusetts General Hospital and University of Washington Medical Center. Trial participants have already experienced a number of benefits from this minimally invasive procedure, including less pain postoperatively and a faster healing process.



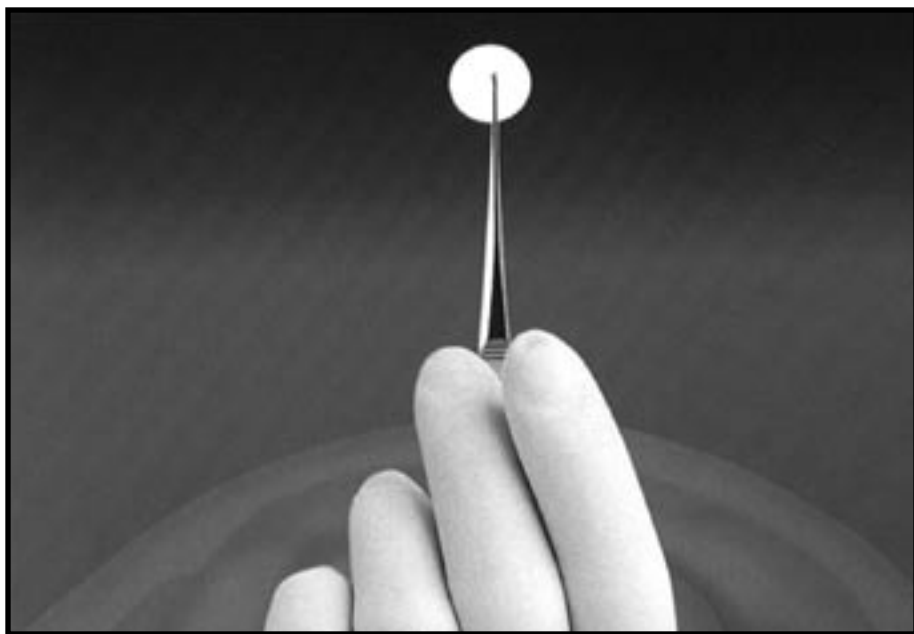
Partial Knee Replacement.

Today, orthopedic joint replacement surgeons like James Dowd, MD, can offer patients the option of a minimally invasive partial procedure which replaces only the damaged part of the knee vs. the entire joint. He was the first to perform this procedure in the area and now is one of several surgeons performing it at SLH, SCH and SVBH. Partial knee replacement requires a much smaller incision (3" vs. 6-8") and less bone is removed, offering younger patients more options "down the road" as the knee ages. It shrinks hospital stays from 3-5 days to overnight, and virtually eliminates the need for blood transfusions. "It has been my experience that most patients have a significantly shorter recovery time with a quicker return to normal activity," said Dowd.



New Technology to Aid Hearing-Impaired, Foreign Language Speakers.

Sentara Virginia Beach General Hospital recently acquired and implemented new technology called "Deaf-Talk," a high-speed, two-way audio/video conferencing service that instantly connects hospital staff and patients with nationally certified American Sign Language (ASL) or trained foreign language interpreters located at a remote location. The equipment, funded by the SVBGH auxiliary, is available 24 hours a day, seven days a week and may be transported throughout the hospital wherever high-speed phone lines have been installed. The equipment is expected to help eliminate communication barriers that can impact patient care.



"Wafer" for Improved Treatment for Brain Cancer.

Approximately 17,900 new cases of brain cancer are diagnosed each year in the United States. Surgery to remove the tumor is the standard treatment, but often microscopic tumor cells can be left behind, causing a re-growth of the tumor. Chemotherapy is an important part of the treatment to address and eliminate these cells. Today, there is a more effective method of delivering that chemotherapy than has existed before. It comes in the form of dime-sized wafers that Sentara neurosurgeons implant in the brain (following tumor removal) to deliver the chemotherapy directly to

the tumor site. "The goal is to put the wafers in the brain and prevent tumors from recurring," says neurosurgeon Joseph Koen, MD. "The wafers sit right on the affected site. So more medicine gets where it's needed." The wafers dissolve within two or three weeks and don't cause some of the debilitating side effects of conventional chemotherapy. They were initially approved by the FDA to treat one of the most deadly of all cancers, glioblastoma multiforme. To date, studies of the treatment conducted in Europe are showing higher survival rates for those patients who received the wafer – 63 percent vs. 19 percent.

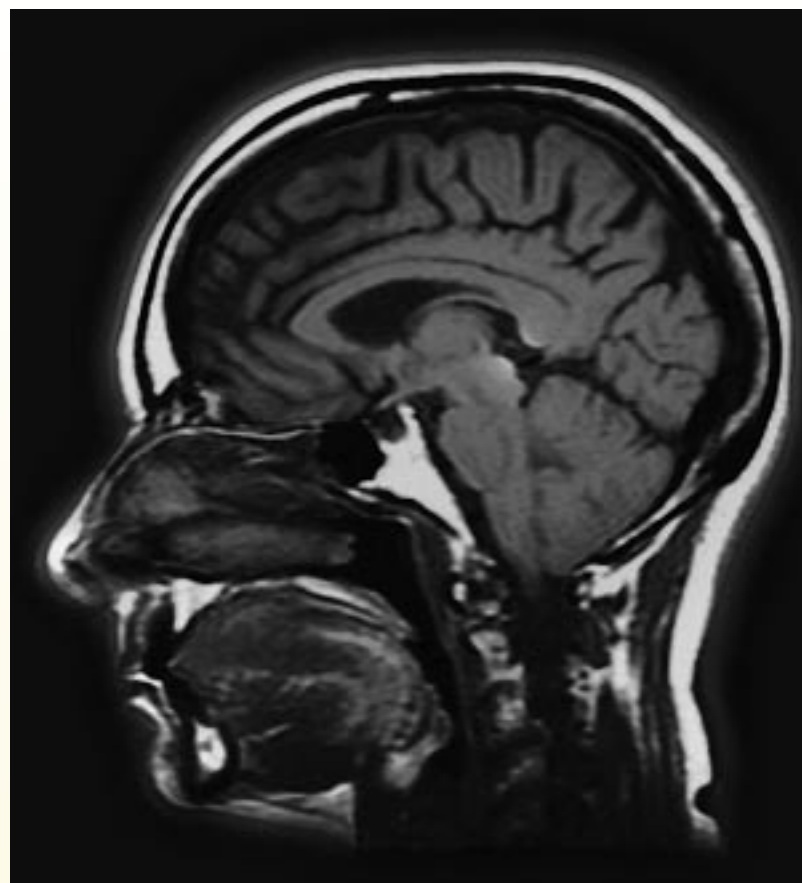


A Closer "Look" at Wound Care.

Wounds are among the most difficult and expensive of conditions to treat, whether the result of surgery or the inactivity of convalescence. Sentara Home Care Services is one of the first agencies in the country to take an innovative approach fusing telehealth technology with a comprehensive, holistic approach to wound care.

The program's goal is to combine up-to-date wound care treatment, nutritional and vitamin supplements and bed overlay products to create a comprehensive ap-

proach to wound care. A full-time, certified wound care nurse consults on wound care patients and assists the physician to facilitate optimal healing. The program is complemented by the latest technology – the admitting nurse records and monitors the wound using a digital camcorder. Using this "telehealth" approach, the visiting nurse relays live, real-time detailed pictures back to the office, where the wound care specialist nurse can study the images and recommend treatment, significantly reducing healing time and improving patient and physician satisfaction.



A Modern Image!

A joint effort between Sentara Healthcare and Hampton Roads Radiology, the Advanced Imaging Center at First Colonial Road in Virginia Beach, provides patients and physicians with a new level of customer service and convenience, as well as radiology services ranging from the simple x-ray to the latest imaging technology on the market.

Under one roof, the Advanced Imaging Center at First Colonial offers all imaging modalities including: plain radiography, fluoroscopy, mammography, ultrasound (including vascular studies), osteoporosis evaluation, computed tomography (CT) and magnetic resonance imaging (MRI), with nuclear medicine to be added in the future.

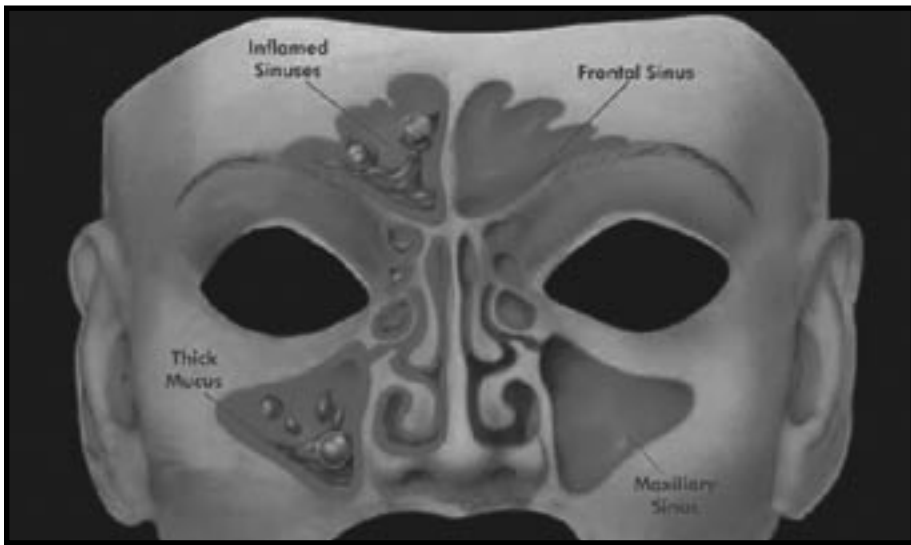
The next advanced imaging center, which will be located in Kempsville near Sentara Leigh Hospital, will be a strategic alliance with Sentara and Medical Center Radiologists.

According to Danilo Espinola, MD, a radiologist with Hampton Roads Radiology, one of the highlights of the facility is a "16 slice" CT scanner – the first of its kind in the area – and the latest, most advanced computed tomography system on the market. "This scanner has the ability to improve image

quality, patient throughput and comfort with shorter imaging times," noted Espinola. "It will also make available to the medical community and the public a new series of studies not available at this time, while improving on the quality of existing studies."

Other new procedures offered at the facility include peripheral arteriography, allowing non-invasive, more comfortable screening and early intervention, and visceral angiography with improved accuracy to serve as a road map for therapeutic intervention. These new scanners will also provide the first opportunity for non-invasive evaluation of the coronary arteries. The center will also offer a physician-driven, focused screening program with screening for lung cancer and coronary artery calcium scoring.

Advanced MRI technology will also be on-site to enhance speed of acquisitions and spatial resolution. This equipment scores higher marks with patients prone to claustrophobia and a high weight tolerance that serves to further enhance patient comfort. In addition, dedicated breast imaging and transrectal coils will be available to stage prostate and rectal cancer. Pelvic floor imaging will also become a reality.

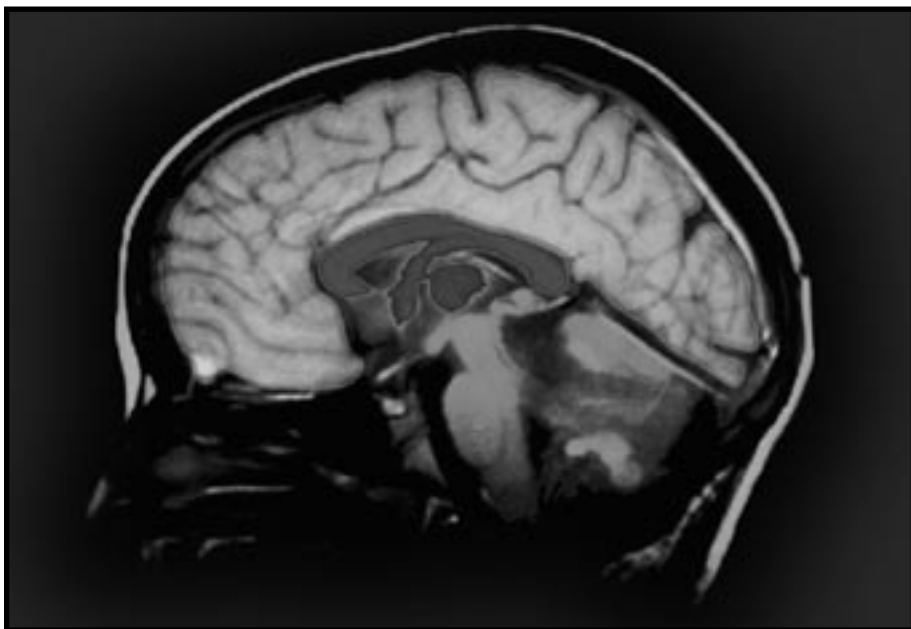


Stealth (Image-Guided) Technology Makes Sinus Surgery Safer.

More than 30 million Americans suffer from the pain and pressure of sinus infections. When sinusitis turns serious, surgery is often the sufferer's only option. Yet traditional sinus surgery can be a complicated and risky procedure due to the proximity to the brain, eyes and major arteries. Now, using image-guided or Stealth technology, Sentara doctors at SNGH and SBH, can safely navigate through trouble spots in the complex anatomy of the sinuses. It will soon be available at SVBGH.

It involves a near-three-dimensional mapping system that

combines CT scans and real-time information about the exact position of surgical instruments using infrared signals, creating a "road map" of the skull and enabling doctors to see in ways – and places – they could not before. The doctor then places a hand-held probe in the patient's nose while correlating its position on the computer screen. Physicians can treat polyps, recurrent infections and benign tumors with this procedure. The procedure is minimally invasive, requires a shorter recovery time than traditional surgery, and minimizes complications while facilitating more complex surgical procedures.



Stereotactic Radiosurgery: Cancer Management Option.

Stereotactic radiosurgery is a state-of-the-art procedure that involves delivering a single, high dose of radiation directly to a brain tumor in the form of an arc. While more traditional methods of radiation therapy treat the entire brain with a uniform dose, this treatment option uses a highly targeted, intense dose, pinpointing the tumor and substantially reducing damage to normal, surrounding brain tissue. If the tumor is located in or near a critical structure of the brain,

this treatment is delivered in small, daily doses over several weeks and is called stereotactic radiation therapy.

Neurosurgeons and radiation oncologists work closely together in delivering these treatments. Clinical studies have shown that stereotactic radiosurgery results in improvements and control of certain brain tumors when compared to more traditional methods of radiation treatment. Stereotactic radiosurgery has also been used successfully in treating other conditions such as Parkinson's disease.



InterStim Therapy.

More than 13 million Americans suffer from urinary incontinence, whether loss of bladder control, excessive urge to empty the bladder (sometimes as often as 40 times a day) and/or the inability to

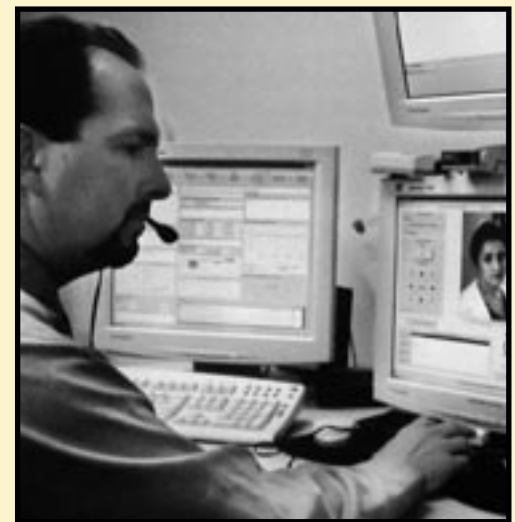
empty the bladder, either fully or at all. Medications and behavioral techniques are usually the first line of treatment for patients. When these fail, patients today have another option: InterStim Therapy. This reversible surgical procedure performed at SNGH and SVBGH, uses mild electrical stimulation of the sacral nerves to control bladder function. The stimulation is delivered via an implanted neurostimulator with a thin wire to the nerves, functioning in a way not dissimilar from the way a pacemaker helps regulate heartbeat. Clinical studies show the procedure has been very successful in addressing urge incontinence, urge frequency incontinence and bladder retention problems.

eICU®

In 2000, SNGH became the first in the nation to fully deploy and independently test the results of a sophisticated intensive care monitoring system known as eICU, developed by VISICU Inc. Since then, this monitoring system has been deployed at Sentara CarePlex Hospital, Sentara Norfolk General Hospital and Sentara Bayside Hospital.

Pioneered by Sentara Healthcare and measured by an independent testing group, in the first year of operation the eICU reduced mortality rates of patients requiring the ICU by 25 percent; and shortened the duration of hospitalization by 17 percent.

Intensive care patients at eICUs are continuously monitored and managed by intensivists who work online from



a remote eICU location when primary care physicians are not at the patient's bedside. Through an elaborate network of cameras, monitors and two-way communication links, doctors and critical care nurses at the eICU command center can make virtual rounds of patients. Intensivists can monitor the condition of patients, check vital signs and communicate with hospital staff, attending physicians, patients or family members.



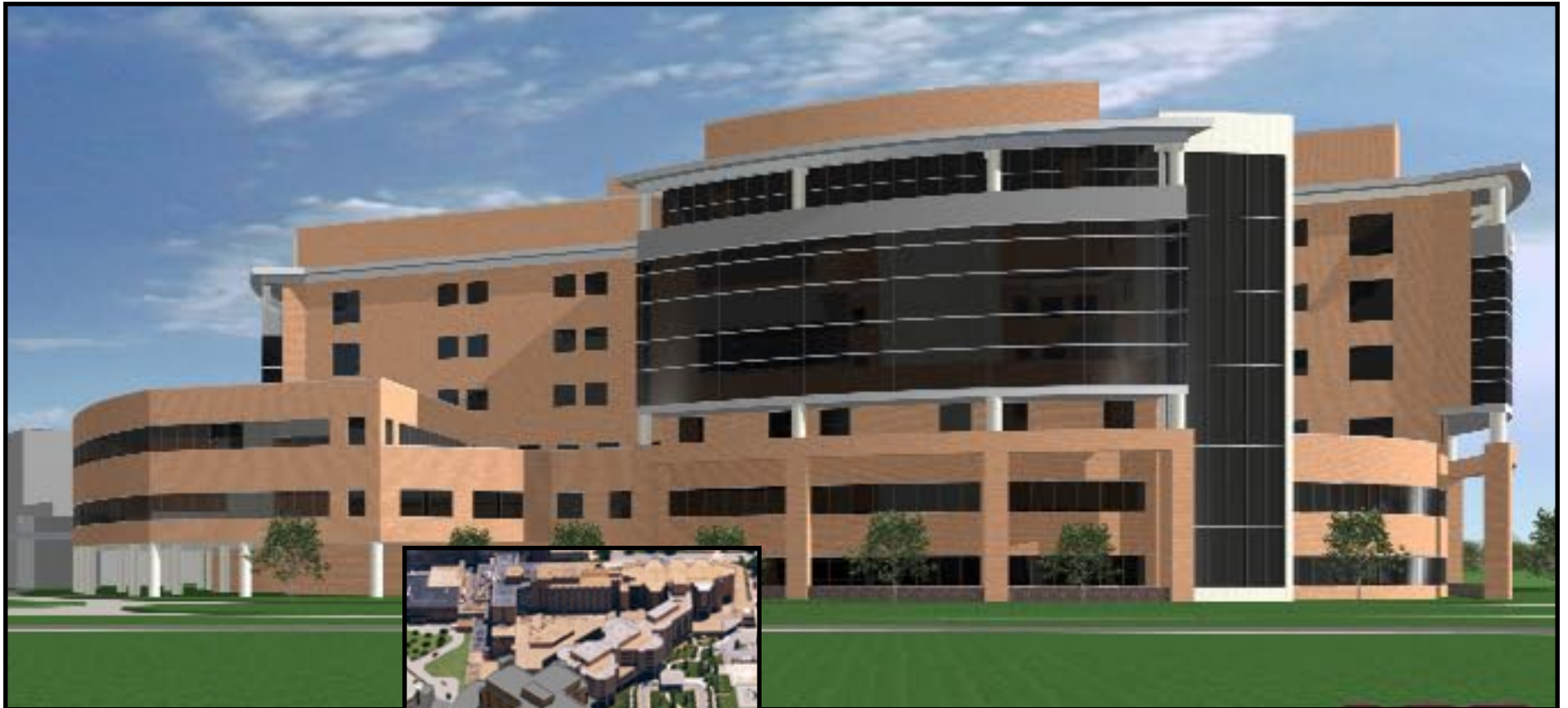
Beating-Heart Bypass.

Traditional heart bypass surgery used to mean stopping a patient's

heart and connecting to a heart-lung machine that essentially "beats" for the heart until it is restarted. Sentara Norfolk General Hospital and Sentara Virginia Beach General Hospital offer this new procedure that allows qualified patients to undergo bypass surgery without stopping the heart. Preliminary results show that beating-heart bypass surgery patients go home from the hospital sooner, and after surgery, are more mobile and feel better than patients who rely on the heart-lung machine.

Plans Announced For State-Of-The-Art Sentara Heart Hospital

—The only one of its kind in southeastern Virginia, northeastern North Carolina—



At a press conference held June 18, Sentara Healthcare announced its plans to build a dedicated cardiac facility—the Sentara Heart Hospital—adjacent to the River Pavilion on the northwestern edge of the Sentara Norfolk General Hospital campus. The new facility would enable patients seeking heart care to receive comprehensive cardiac services—everything from diagnostics and interventional cardiology to open-heart surgery and transplantation—at one location.

On July 1 Sentara submitted a Certificate of Public Need (COPN) application to the Commonwealth of Virginia seeking approval of

plans to expand and renovate Sentara Norfolk General Hospital, making way for the Sentara Heart Hospital. Upon the commonwealth's approval, Sentara would begin construction on the only state-of-the-art, digital heart hospital in southeastern Virginia and northeastern North Carolina. Plans for the Sentara Heart Hospital include a six-story, approximately 300,000-square-foot building estimated at \$94.5 million, which will adjoin the River Pavilion on the first, second and third floors, linking it to

Sentara Heart Hospital, a six-story cardiac facility, is scheduled to open in 2006. It will feature strategic design innovations that will reflect the most progressive thinking.

the existing campus to facilitate patient care.

Television icon Andy Griffith, best known for roles in his CBS series *The Andy Griffith Show* and *Matlock*, shared in Sentara's announcement. The well-known actor underwent quadruple bypass surgery at Sentara Norfolk General Hospital May 9, 2000.

"Without question they saved my life," said Griffith. "It was a complete emergency, and I was blessed we ended up at Sentara Norfolk General Hospital. I have great trust in the entire medical staff at that hospital," he added.

According to the American Heart Association, nearly 2,600 Americans die each day from cardiovascular disease, claiming an average of one life every 33 seconds. By building on the successes of Sentara Norfolk General Hospital's nationally recognized heart program, Sentara is leveraging its cardiac resources to research, educate, prevent and

treat the nation's and Hampton Roads' No.1 killer.

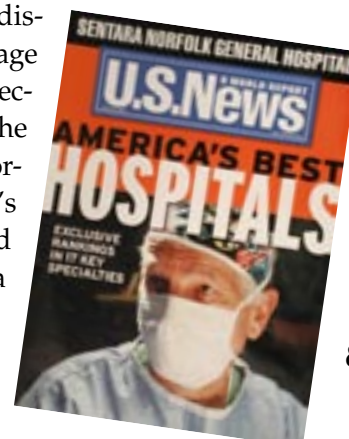
Most recently Sentara Norfolk General Hospital was honored for heart care by HealthGrades®, a healthcare quality ratings and information services company, with its prestigious 5-star ranking in cardiac services—the highest possible. In fact, in 2003 Sentara Norfolk General Hospital ranked No. 1 in Virginia in the areas of overall cardiac services, heart surgery, cardiology, and cardiac interventional procedures.

Sentara's Chief Executive Officer David L. Bernd said, "Sentara is committed to delivering the highest level of cardiac care possible to residents throughout southeastern Virginia and northeastern

North Carolina. We have been fortunate to grow a successful heart program at Sentara Norfolk General Hospital over the In 2002, SNGH ranked 23rd in the nation for heart and heart surgery by U.S. News & World Report.



Andy Griffith and his wife Cindi share his experience as a former patient at SNGH. "Without question they saved my life," he said.





(L-R)
Bernd and Chief Medical Officer Rod Hochman, MD, at the June 18 press conference.

“Our commitment to the community extends well beyond this building. Sentara continues to provide the best in cardiac care. Sentara Virginia Beach General Hospital offers an excellent cardiology program and cardiac surgery program with those same heart surgeons that operate here at Sentara Norfolk General Hospital. Sentara also provides access to top heart care through our heart clinics and our hospitals including Sentara Leigh, Sentara Bayside, Sentara CarePlex and Sentara Williamsburg Community Hospital.”

Howard Kern
President and Chief Operating Officer
Sentara Healthcare

last 36 years that outpaces national benchmarks of excellence. True to our mission, we are moving forward with plans to offer enhanced, groundbreaking cardiac care to patients in the region.”

“Sentara has worked extensively and partnered within the community to provide education about prevention as well as identify risk factors and treat this deadly

disease,” said Sentara’s President and Chief Operating Officer Howard Kern. “And our commitment to the community extends well beyond this building. Sentara Virginia Beach General Hospital offers excellent cardiology and cardiac surgery programs with those same heart surgeons that operate here at Sentara Norfolk General Hospital. Sentara also provides access to top

heart care through our heart clinics and at our hospitals including Sentara Leigh, Sentara Bayside, Sentara CarePlex, and Sentara Williamsburg Community Hospital,” Kern continued.

The driving force behind the Sentara Heart Hospital’s design has been efficiency to support superior patient care, synergy of comprehensive cardiac services, and visionary advances in technology. The new facility will be digital—a wireless environment—allowing doctors and nurses to be closer to the patient’s bedside. The design of inpatient surgery and medicine step-down units will improve workflow. Provisions have been made, such as larger, all private rooms, to promote family involvement in the patient’s care. Patient and family lounges are designed with children and families in mind, including refreshment and quiet areas, unique business centers with Internet access, and other appropriate amenities. The new facility will have a four-story parking garage with more than 450 spaces.

Continued on page 8



Sentara Norfolk General Hospital was recently honored for heart care by HealthGrades®, a health care quality ratings and information services company, with its prestigious five-star ranking in cardiac services - the highest possible. In fact, in 2003, Sentara Norfolk General Hospital ranked No. 1 in Virginia and among the nation’s top 5 percent of cardiac facilities in the areas of overall cardiac services, heart surgery, cardiology, and cardiac interventional procedures.



Phyllis and Peter Pruden of Suffolk donated \$100,000 for cardiac research and education. Pruden, a grateful former patient at SNGH, and his wife attended the press conference.



(L-R): Lenox Baker, MD, Crile Crisler, MD, and Carl Hartman, MD. Since 1967, close to 100,000 cardiac interventions and more than 32,000 open-heart surgeries have been performed at SNGH – with results far better than national standards.

“Our vision is to provide cutting-edge cardiac care within reach of all neighborhoods in Hampton Roads. This new facility will be focused on patient convenience while still ensuring that quality of care is paramount,” said Rodney F. Hochman, MD, Sentara’s chief medical officer.

The Sentara Heart Hospital will include an increased number of cardiac operating rooms from four



Norfolk Mayor Paul Fraim noted how grateful the community is for the great quality of care rendered at SNGH and in the future.

to five and catheterization labs from five to six, as previously approved by the state, and an additional electrophysiology lab—a room used to evaluate the heart’s electrical system—for a total of three. The new facility will also include additional outpatient cardiac services, a conference room, and education space.

Since the cardiac program’s inception at Sentara Norfolk General Hospital in 1967, clinicians and doctors have performed nearly 32,900 open-heart surgeries, 96,600



“The heart hospital we are planning will meld the latest technology, research and nationally acclaimed talent not just to meet the needs in 2006 – but in 2026,” said Donald Clark, Sentara chairman of the board.

interventional procedures, and 212 heart transplants. Sentara Norfolk General Hospital became the first Hampton Roads hospital to implant a drug-eluting stent in 2003 using the latest in interventional cardiology devices to be approved by the U.S. Food and Drug Administration. Sentara Norfolk General Hospital’s heart program ranked 23rd out of 50 U.S. hospitals named for cardiac care excellence in a 2002 survey by *U.S. News & World Report*, the only hospital in southeastern Virginia and northeastern North Carolina to earn a place in the survey. As part of its comprehensive heart program, Sentara continues to make a significant commitment to research, providing its patients the latest treatment options.

For more information about the Sentara Heart Hospital or the Sentara Heart Program, please visit <http://www.sentara.com/heart/>

transplant program is celebrated. Norfolk Mayor Paul Fraim proclaims October 7 as Heart Transplant Day.

Sentara Norfolk General Hospital Heart Program Milestones

1967 SNGH performs the first open-heart surgery in the region.

1970 New open-heart surgery program opens at SNGH.

1989 Sentara performs Hampton Roads’ first heart transplant at SNGH.

1999 10th anniversary of Sentara’s heart

2001 Surgeons work through the night to perform the region’s 200th heart transplant at SNGH.

2003 SNGH implants the region’s first drug-eluting stent.

F A C T S A B O U T

- Sentara Healthcare filed a Certificate of Public Need (COPN) application to the Commonwealth of Virginia on July 1, 2003, seeking approval to expand and renovate Sentara Norfolk General Hospital, resulting in the construction of a comprehensive cardiac care facility, the Sentara Heart Hospital, on the campus of Sentara Norfolk General Hospital, 600 Gresham Drive, in Norfolk.

- Plans for the Sentara Heart Hospital involve construction of a six-story, approximately 300,000-square-foot facility adjoining the existing River Pavilion on the first, second and third floors.

- The Sentara Heart Hospital is scheduled to open in 2006 with all private rooms. Included will be 112 licensed inpatient beds and 46 pre/post procedural rooms dedicated to patients undergoing interventional cardiac procedures.

- A four-story parking garage with more than 450 parking spaces will be constructed nearby.

- The state-of-the-art, digital facility will house five cardiac operating rooms designed to accommodate 2,000 cardiac surgery procedures each year.

- The Sentara Heart Hospital will be unique to southeastern Virginia and northeastern North Carolina in that it will consolidate comprehensive cardiac services — from diagnostics and interventional cardiology to open-heart surgery and transplantation — all under one roof.

- Relocating heart services into one facility will: 1) provide adequate space to growing departments such as ambulatory surgery, GI/endoscopy, vascular, laboratories, anatomical pathology, oncology, and admissions; 2) relocate and modernize all medical and surgical inpatient rooms to newer wings of the hospital; 3) allow other existing space to be converted to administrative and educational areas.

- The first/ground floor of the new hospital will feature: a lobby/public area; a café; Cardiac Outpatient Diagnostics Center; ambulatory care; an education/conference center; cardiac administrative offices and an ambulance entrance.

- The second floor will feature an eight-bed cardiac intensive care unit (CICU); Cardiac Procedure and Evaluation Center; a suite of six cardiac catheterization labs with capacity to handle approximately 7,200 catheterization procedures per year, three electrophysiology (EP) labs and pre/post procedure rooms.

- The third floor will feature five cardiac operating rooms and a 20-bed cardiac surgery intensive care unit.

- The fourth floor will feature a 36-bed cardiac surgery stepdown unit.

- The fifth floor will house 48 cardiac interventional beds and function as the cardiac medicine stepdown floor.

- The sixth floor will feature medical office space.

- Anticipated opening of the facility: 2006.



Intensity Modulated Radiation Therapy (IMRT) Improves Cancer Outcomes.

Sentara was one of the first health systems in Hampton Roads and is one of only a few in the country to offer IMRT for cancer treatment. First offered at SVBGH, it is now also available at SNGH and SCH. This relatively new treatment option in radiation therapy matches

the radiation dose being given to the shape and location of a tumor, thus avoiding damage to the surrounding tissue. It uses many small beams of radiation with differing intensities instead of using a few large, uniform fields, enabling radiation oncologists to safely deliver higher doses of radiation than previously possible, improving outcomes and reducing side effects. The therapy has shown dramatic cure rates in select cancer treatment centers across the country. While not appropriate for all patients, IMRT is applicable to many cancers and has been found to be most beneficial in treating prostate, brain, head and neck cancers, and it can also provide a second chance for patients who have tried conventional radiotherapy without success.



New Option to Traditional Hysterectomy.

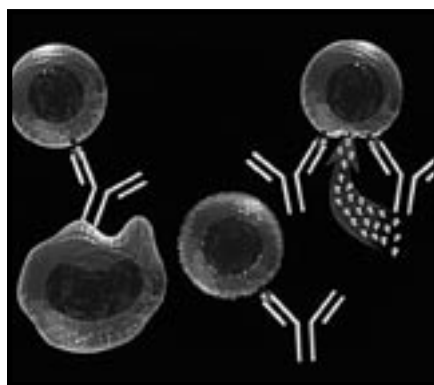
One alternative for women facing a hysterectomy procedure is laparo-

scopic supracervical hysterectomy (LSH), an advanced endoscopic technique that is less invasive than traditional hysterectomy. This minimally invasive procedure allows for a much smaller incision (1/2" versus 6") that shrinks recovery time from six weeks to two weeks and significantly reduces the required hospital stay as well. Other benefits include reduced pain and blood loss and less scarring. LSH can be an excellent choice for women suffering from fibroids, endometriosis and abnormal uterine bleeding.



Robotic-Assisted Surgery.

Robotic-assisted surgery in certain procedures is performed at SCH and SNGH. Using robotics during surgery allows surgeons to perform new, minimally invasive procedures that require a smaller incision, improve patient outcomes, eliminate hand tremors and increase visualization of the surgical site. The robotics include: the ZEUS[®] Robotic Surgical System, a three-arm robot that translates the surgeon's hand motions into precise microsurgical movements via robotic instruments; the AESOP[®] Endoscope Positioner, a one-arm, voice-activated robot that positions a small, pencil-sized camera to view inside the patient's body; HERMES[®] Control Center, a voice-recognition system that hears, understands and translates doctors' commands into actions; and the SOCRATES[™] Tellecollaborative System, an integrated system of telecommunications equipment, networked surgical devices and robotics that enables remote telemonitoring and surgical training.



Zevalin Radioimmunotherapy.

Williamsburg Community Radiation Therapy Center is the first community center, and currently the only area center, to be approved for the use of Zevalin therapy.

Zevalin is the first radioimmunotherapy approved by the FDA, opening the door on a new class of cancer treatments that combines the targeting ability of antibodies with the cell-damaging effects of radiation. The radiation antibodies circulate in the body until they locate and bind to the surface of specific cells. They then deliver radiation directly to cancerous cells only.



Wireless Telemetry.

Hospitalwide wireless telemetry is now available at Sentara CarePlex Hospital. Continuous monitoring of vital body functions is critical to the care of certain types of hospitalized patients. The need for monitoring often requires patients to be restricted to a specialty care unit or even to a bed, tethered to a monitor. Wireless (portable) telemetry involves a small monitor that measures a patient's vital signs and transmits them through high-powered UHF digital signals. This offers patients with certain conditions more freedom to move around, facilitating visits with family outside of the hospital room, and/or the opportunity to exercise. It also allows staff to quickly locate and treat monitored patients should the need occur.

Healthy Community Programs.

Sentara Health Management launched an innovative new OB program, known as Partners in Pregnancy, in April 2002, with the goal of improving birth outcomes. It consists of registered nurse OB case managers and trained patient advisory reps who call on mothers with



high-risk pregnancies, conduct risk assessments and provide appropriate interventions. Consequently, Hampton Roads is experiencing the first reduction in the low-weight-birth rate in four years.

Similarly, high-risk diabetes patients are assigned a "coach" nurse with specialized training in diabetes. Patient and coach

set mutually agreed-upon goals in treatment areas such as nutrition, exercise, medications and monitoring. The patients receive individualized assessments of readiness to make behavioral changes and appropriate education is provided. Patient and coach develop a treatment plan, and goals and progress are regularly evaluated. In 2001, this resulted in a 20 percent reduction in hospital admissions, a 19 percent reduction in diabetes-related ED visits and an increasing percentage of participants who are in "excellent" control of their disease.

Sentara's Asthma Disease Management Program identifies and educates Optima and Sentara Health Plan members who have asthma, to reduce the frequency and severity of asthma attacks. Education, mutual goal-setting and evaluation are also the hallmarks of this program. To date, the program has helped decrease emergency room visits by 20 percent and hospital admissions by 40 percent among high-risk members.

Career Development Center

Human Resources announces the enhanced availability of career information services through the new Career Development Center. It was developed as a part of our Members of the Team efforts and will focus on encouraging entry into healthcare-related careers.

The initial offering is a special WaveNet site containing information about many healthcare jobs including descriptions, educational and licensing requirements, and links to many important resources.

In the future, additional career information will be available including: financial assistance, career interest assessments, reference material and career guidance information.

The Website allows you to communicate directly with the Career Development Center, and create a "career interest profile" for yourself. For information, call 228-7444.

Look for "Career Development Center" on WaveNet and take a few moments to complete our career development survey on WaveNet.

Sentara Health Check

Health care today is administered very differently from how it was done years ago. One key difference is that the patient has become much more knowledgeable and self-driven about his or her health profile.

That's why Sentara Health Check was developed – a simple testing and screening service that puts control of personal wellness in the patient's hands. Patients order their own tests based on specific guidelines such as family history, past medical conditions and other risk factors. Staff is always available to explain tests and offer assistance. All lab tests are performed by Sentara's highly credentialed and experienced professionals, processed through the CLIA-certified laboratory and supervised by Sentara's medical director.

Screening results are mailed directly to the patient, along with a consumer-friendly explanation of the studies, including recommendations for follow-up. Patients can elect to have copies mailed to their physicians as well.

Services can include one or two screenings or an entire cluster, based on personal needs and conditions. All services begin with a complimentary screening of blood pressure, pulse, height and weight and patients fill out a brief self-

assessment questionnaire as well. Early detection screenings for a number of cancers are also available.

Sentara Health Check is located next to SVBGH and is open Monday-Friday from 7:30 a.m. to 5 p.m. For information, call 757-395-6360.

Passport Health "Travels" to a Third Location

Passport Health, your one-stop source for ensuring healthy international travel, offers consultations with a travel health nurse specialist, safety and security briefings, specialty travel supplies, travel insurance and a free international translator wallet card.

Passport Health is located in Chesapeake at IntraCoastal Family Practice, in Norfolk at the Executive Evaluation Center, and in Virginia Beach at the Sentara Bayside Medical Office Building. For information, call 757-363-6770.

Life-Saving Time Off

In an effort to promote living organ donation, Sentara adopted an enhanced paid leave policy Feb. 1, 2003, which now provides additional time off for employees who donate organs and bone marrow. From the minute they are hired at Sentara, all full- and part-time employees are eligible to receive paid leave to recuperate, up to 30 calendar days for organ donations and seven calendar days for bone marrow donations. With a growing number of people needing transplants, living donations of kidneys and livers have become a promising source of organs for transplant.

Compliance and Ethics

Over recent years, the government has played a more significant role in regulating our business activity and ensuring patient quality of care. To that end, we provide both orientation and annual training to all divisions, and offer many additional resources, including the handbook, *A Guide to Compliance and Ethics at Sentara*; and a Sentara Integrity Employee Hotline that enables us to perform confidential investigations and work with government regulators.

In recent years, national conditions have required our compliance program to expand. The changes reflect increased scrutiny at the federal level (partially in response to the recent WorldCom and Enron

downfalls), new and more involved regulations regarding patient confidentiality, and a rapidly evolving regulatory environment.

Recent activities in our department include revising and expanding the handbook (check the Compliance and Integrity site on Wavenet), developing a new training approach at the hospitals and the nursing homes using computer-based technology, and developing a new compliance video.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) is a federal privacy law that has several components. New systemwide policies and procedures addressing a patient's rights to restrict, authorize, and amend his/her Protected Health Information (PHI) are now posted on WaveNet. All health plan members and Sentara employees with health benefits have been sent the Notice of Privacy Practices, which explains what Sentara does with their PHI. If you have questions regarding HIPAA, submit them through WaveNet. Refer patients

with questions regarding the Notice of Privacy Practices to the HIPAA privacy officer contact number, 857-8494.

For more information, call 455-7777 or 687-6001, and ask for Linda McKee or Greg Burkhart.

Hyperbaric Oxygen Center Opens

Hyperbaric oxygen therapy will now be available for Peninsula residents, as a Hyperbaric Oxygen Center opened in late July at the Port Warwick Medical Arts. The center contains a specially outfitted and state-of-the-art hyperbaric delivery system that can safely and effectively treat patients with problems such as diabetic wounds, osteoradionecrosis, soft tissue radionecrosis, and compromised skin grafts and flaps.

The only other HBO clinical facility in the region is located on the ground floor of SLH, which opened in November 1997. This facility has the capability of treating critically ill and ventilated patients, should they be referred from Port Warwick.

Auxiliary Update

SWCH- This auxiliary enjoyed its most delicious fundraiser of the year, the 21st annual 4th of July Ice Cream Social at the Wren yard in front of The College of William & Mary. The 2003 Mistletoe Market will be held Nov. 22 - 23.

SBH- This auxiliary hosted an awards dinner celebrating volunteer hours – a total of \$33,415 for 2002! The junior volunteer program runs from June 23 to Aug. 8; they will celebrate their awards ceremony on Aug. 11.

SVBGH- This auxiliary has been busy raising money for hospital projects. A jewelry sale and a luncheon and fashion show together raised \$2,480. The year's Ace of Hearts tennis tournament was held in May. Last year's tournament raised \$18,000. Forty knitters produced 1,419 caps in the past year for the hospital's newborns. Nursing and medical program scholarships worth \$10,000 will go to seven students. In addition,

checks totaling over \$115,200 were presented to a number of organizations: the Coastal Cancer Research Center, the Beach Health Clinic, and 10 sleep chairs for the NICU.

SCH- The big news for this auxiliary is the opening of their spectacular new gift shop at the York River entrance to SCH. The 1,150-square-foot showroom (plus 450-square-foot of store room) marks this as the largest hospital gift shop in Virginia.

SNGH/ SLH- The Auxiliary to Sentara Hospitals-Norfolk Inc. awarded \$75,000 in scholarships to recipients in RN, LPN, CVT and other clinical areas. Three-year Rainbow Scholarships for registered nursing were given to Allison Barnes and May Pamintuan. The SLH auxiliary gift shop's expansion will be completed in early September. The auxiliary approved the purchase of an ERBOKRYO CA System for \$16,265.00. It will be used during endoscopic procedures to freeze that portion of the tissue to be removed.

A New Name

The Board of Sentara Williamsburg Community Hospital announced the name of the new hospital that will one day replace Sentara Williamsburg Community Hospital: Sentara Williamsburg Regional Medical Center. Construction on the new hospital, to be located on Mooretown Road in York County, will begin next year. It will sit on an 84-acre campus and be licensed for 139 beds, with an expanded Emergency Department. The hospital will require an investment of approximately \$96 million.

Outpatient Care Center

On Aug. 1 the first phase of Sentara Williamsburg Regional Medical Center opened, offering a new experience in outpatient services, including: ambulatory surgery, outpatient testing and diagnostics, outpatient rehabilitation services, pain management, a women's imaging pavilion and three physician practices.

IT Network Conversion

As part of SWCH's overall integration into Sentara, the Information Technology (IT) network integration began in June, resulting in access to Sentara technology systems, including WaveNet.

Collaboration at Grove Christian Outreach Center

Since May 2001, Pat Biank, RN, has checked blood pressures and provided health counseling to between 20-30 people at the Grove Christian Outreach Center.

Block Buddies is a neighborhood health promoter program which provides neighborhood volunteers with 15 weeks of intensive health education on many topics. Every month, a Block Buddy joins Pat at Grove, to help foster the connection between health services and those who need them. The goal of the Neighborhood Nurse

is to reduce the risk of heart attack, stroke and cardiovascular disease through recognition and treatment of risk factors. Block Buddies encourage people who might not otherwise access healthcare.

In 2002, Williamsburg Community Health Foundation presented Block Buddies with the Healthcare Hero award for an outstanding communitywide hospital program.

The Planetree Initiative

In the late 1970s a holistic approach to patient care called Planetree grew up on the West Coast. It encompasses the physical aspects of healing and concentrates on emotional, spiritual and social factors involved in getting well. Last year SWCH became one of more than 60 hospitals across the country known as a Planetree facility.

Examples of the Planetree approach are evident throughout the hospital: the Family Maternity Center's home-like, spacious rooms that encourage family visitation; the music of a local musician piped through the halls; vibrant artwork hung throughout the patient rooms and common areas; a lounge with kitchenette for visitors' comfort; a full-time concierge for patient and visitor questions; a network that allows patients to watch cable and movies and access e-mail; volunteers who chauffeur patients and visitors around the parking lot in a golf cart; and the ASSIST program designed to help people who become ill while on vacation in the Williamsburg area.

When the new hospital opens in 2006, it will incorporate Planetree from the ground up – with patient rooms, waiting areas and floor plans all reflecting the Planetree model.

Background information from a Virginia Gazette article by Ann Efimetz.

Congratulations

Solucient, a national research firm that conducts a survey of top hospitals in the nation, has named **Sentara Leigh Hospital** and **Sentara Virginia Beach General Hospital** two of the nation's top 100 hospitals for 2001. Solucient recently corrected a prior release of the 2001 ranking indicating that both SLH and SVBGH should have been included in the original release. The study, 100 Top Hospitals National Benchmarks for Success, identifies industry benchmarks by recognizing hospitals that demonstrate superior clinical, operational and financial performance.

For the past six years, *Modern Healthcare* magazine has published a fact-based study highlighting the top 100 Integrated Health Care Networks (IHN) in the nation. Without fail, **Sentara** has ranked in the top 10 of this list, remaining consistently in the No. 1 position for the East Coast and again maintaining the No. 2 spot nationally.



Shirley Wharton, former senior vice president at SNGH, assumed a newly created system leadership role as Chief Nursing Officer for Sentara. She has relocated to SVBGH, where she also serves as Nurse Executive.



Lois Kercher, former Nurse Executive at SVBGH, assumed the duties of Nurse Executive at SNGH.

of successful home care agencies by *Home Care Magazine*. The December 2002 edition listed the "secrets of success" for the top 25 home care agencies in America.



William Atchley Jr., MD, a hospitalist at Sentara CarePlex Hospital, has been elected secretary of the Society of Hospital Medicine.

Sentara Medical Group welcomes Patrick Haggerty, MD, to Port Warwick Internal Medicine.

The American Association of Health Plans awarded a Grant for Innovation in Immunization Practices to **Sentara Health Management** for its Stay On Track daycare initiative: PromotingDTaP - 4 Through Daycare Providers, an innovative, community-based model for improving time-appropriate immunization rates in children age 2 and under in participating daycare centers. The grant will be administered by Sentara's Division of Community Health and Prevention on behalf of SHM.

Sentara Home Care Services and **Sentara Health Management's** collaborative asthma Life Coach program recently got national television exposure in 45 major cities across America. Life Coach was selected by the EPA as the most noteworthy asthma program in the country. The result was a 12-minute video news release "package" (VNR) hosted by former Secretary of the EPA Christy Whitman, and featuring a Chesapeake-based brother and sister along with Home Care Life Coach Melanie McIntosh, RN.

Patient Safety

SNGH has partnered with the Greeley Company and Performance Improvement International for their assistance in developing and implementing a medical and healthcare performance improvement in safety program. The plan is designed to prevent errors by ensuring that behaviors that prevent errors become an inherent and instinctive part of the hospital's culture.

The strategy was developed based on results from a safety survey assessment, which surveyed staff, physicians and management. The plan will focus on:

- Teach and implement behaviors for error prevention: develop and train staff on behavior-based expectations for human error prevention.
- Simplify and focus policy and procedures: simplify policies and procedures and develop "Red" rules

to be followed by everyone.

- Improve common cause analysis: identify and train core groups of staff on root cause and common cause analysis to strengthen the cause analysis process.

A work team for each of the above areas has been developed and the teams are currently implementing the processes. Five behavioral expectations were identified for team members at SNGH: **1. attention to detail; 2. communicate**

clearly; 3. questioning attitude; 4. effective handoffs; and 5. never leave your wingman.

Education began in April and will continue through August until all employees are trained. Once the training is complete, staff will be monitored to ensure that the tools are being used appropriately. The goal for 2003 is to have the staff utilizing these techniques a minimum of 75 percent of the time.



(L-R): Norfolk Mayor Paul Fraim, SLH Administrator Larry DePriest, with Southgate Leigh and Jennifer Leigh, direct descendants of hospital founder Dr. Southgate Leigh, at the SLH 100th anniversary celebration.



(L-R): Jennifer Ramiro and Virginia Beach Mayor Meyera Oberndorf at the Advanced Imaging Center open house on May 14.



(L-R): Marilani and her mother Marilou Huling at the May 3 Nurses Walk, part of the annual Week of the Nurse festivities. This year's walk was held at Sentara Hampton Health and Fitness Center.



(L-R): Sentara Promise winner Gloria Wallace, Sentara Williamsburg Community Hospital Administrator Les Donahue and fellow Promise winner Brandie Weiler at the March semi-annual management meeting.



(L-R): SCH Administrator Megan Perry, Gift Shop Manager Bonnie Condrey and Auxiliary President Sara Suddeth at the opening of the new SCH gift shop, the largest in Virginia.



Diane Pauly Whalen, School of Health Professions, class of '76, points out her graduation photo in the yearbook at the June 29 "Goodbye to Jenkins Hall" farewell celebration.



CEO award winners Linda Cockrell, far left, and Shelly Vinson, far right, along with Sentara CEO Dave Bernd, and a few of the Key Contributor award winners from the School of Health Professions team. (L-R): Kathleen Butterbaugh, Donna Bishop Sandloop and Janet Solomon.



(L-R): Debbie Tillman and Diane Najera at the May 1 Sentara Promise Day exhibition at Sentara Home Care. Displays were held throughout the system to build awareness for the Sentara Promise program.



March 2003 Sentara Promise Winners. (L-R): Front row: Melinda Jermer, Lynn Ellis, Mary Howell, Tita Bersamina, Debby Proffitt and Gloria Wallace. Second row: Vernon Griffin, Ruth Black, Lucretia Beckett, Grand Prize Winner Pearl Brenner, Robin Stunda and Brandie Weiler. Third row: Nancy Allan, Laura Kins, Donna Buckley and Joanne Conaty. Fourth row: Lori Simpson, Karen Buchanan, Noel Wharton, José Lopez and Monty Montgomery. Not pictured: Mary Broadwell and Ramona Mixer.