MARTHA JEFFERSON HOSPITAL
SURGICAL INTERVENTIONAL PROCEDURAL CENTER

From “Kicking and Screaming” to “One Big Happy Family”
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When executives at Martha Jefferson Hospital in Charlottesville, Va. began working with Navigant Consulting and Kahler Slater to plan their replacement facility, they recognized the efficiencies and flexibility that could be gained by bringing its invasive procedure programs under one organizational umbrella and into a shared physical space. Making it happen, however, would be much easier said than done. They were wading into uncharted waters.

They would be integrating eight departments – surgery, vascular interventional radiology (VIR), endoscopy, cardiac catheterization/electrophysiology, pre-procedure/recovery, post-anesthesia care (PACU) and central sterile processing. No other facility had successfully operationalized a platform encompassing this many departments to the extent that Martha Jefferson Hospital envisioned. There were few models to follow and little literature to reference. Many in the affected departments were skeptical of the idea and reluctant to share “turf.”

With the help of their consulting partners, the hospital’s leaders pursued their vision, however, and when the hospital opened in August 2011, it included a 60,000-square-foot Surgical Interventional Procedural Center (SIPC) housing the four procedural services and all of its supporting components.

The following paper outlines how the Martha Jefferson Hospital project team operationalized the SIPC – including planning and design, staff engagement, staff training, and post-occupancy refinements – and the benefits it has brought.
POST-OCCUPANCY RESULTS SHOW SIGNIFICANTLY IMPROVED OUTCOMES

Post-occupancy study results validate the approach that Martha Jefferson Hospital took in developing the SIPC.

On-time starts for surgeries and procedures are up dramatically – by 56 percent in the VIR unit, by 50 percent in the endoscopy unit, and by 7 percent (from an already strong baseline of 79 percent) in surgery. With an 86 percent on-time start rate for surgeries (measured based on when the incision is made for the first surgery of the day), Martha Jefferson Hospital has the best record of all Advisory Board Company clients nationwide.

Turnover time for procedure rooms is down by 62 percent. It stands at 19 minutes for ambulatory cases, beating the national goal of 20 minutes. Overtime in the various departments is down by up to 23 percent.

Hospital-wide, overall patient satisfaction is up 21 percent, according to the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), and well above the national average. Staff satisfaction hospital-wide increased 18.2 percent between 2008 and 2011, according to a survey by The Advisory Board Company.

Martha Jefferson Hospital’s Composite Efficiency and Productivity Score, reported in Virginia Health Information’s “2012 Industry Report: Virginia Hospitals and Nursing Facilities,” is a full 13.6 percent better than the Virginia state average.

And Martha Jefferson Hospital provides care at an 8 percent lower cost than other hospitals in Northwestern Virginia, based on dollars paid per admission, according to Virginia Health Information’s “2012 Industry Report: Virginia Hospitals and Nursing Facilities.”
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<tr>
<th>Metric</th>
<th>Improvement/Change</th>
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<tr>
<td>On-time starts for Surgeries and Procedures — Vascular Interventional Radiology</td>
<td><strong>56.0%</strong></td>
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<tr>
<td>Turnover time for procedure rooms</td>
<td><strong>62.0%</strong></td>
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<td>Overtime for SIPC departments</td>
<td><strong>23.0%</strong></td>
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<td>On-time starts for Surgeries and Procedures — Endoscopy</td>
<td><strong>50.0%</strong></td>
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<td>On-time starts for Surgeries and Procedures — Surgery (from a strong baseline of 79% on-time starts)</td>
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<td>Turnover time for procedure rooms — Ambulatory cases (vs. national goal of 20 minutes)</td>
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THE SIPC – AN OVERVIEW

The Vision
The vision for the SIPC was to increase efficiency and improve patient care – without increasing manpower – by creating a procedural platform that would combine pre- and post-procedure care for surgical, VIR, endoscopy and cardiac catheterization/electrophysiology patients.

The SIPC would achieve this vision by:

• Bringing the procedural and support services, which were scattered throughout the old facility, together under a single physical roof. This proximity would allow for the convenient sharing of resources, including space, equipment, supplies and personnel, while eliminating much of the waste due to transportation in the current system.

• Designing a facility that would offer flexibility to meet changing needs, both to support long-term growth and to accommodate day-to-day fluctuations in procedure volumes.

• Completing a thorough comparison of all process flows, assessment requirements and existing documentation, and then using that information to create a new assessment/documentation tool that is specific to each department and procedure type.

• Embracing the overall design intent of the replacement hospital – to reduce the anxiety that patients and visitors associate with being on a medical campus by providing a soothing transition into the health care experience and offering a welcoming, home-like atmosphere.

• Create a consensus operating statement for the SIPC, including parameters for both patient and staff safety and quality, through sharing each other’s mission and vision.

• Insist upon impeccable teamwork and camaraderie among the departments that make up the SIPC.

• Develop a plan to operationalize the SIPC in the replacement hospital.

• Ensure that operating plans maximize the efficient and effective use of full-time-employee resources where functions overlap and can be consolidated given the new environment.

• Where possible, trial suggested changes in the old facility to test assumptions before moving into the replacement hospital.
The Mission
The following mission statement summarizes the SIPC’s purpose:

We are the invasive procedural platform for Martha Jefferson Hospital, providing a safe, compassionate, personalized experience through multidisciplinary teamwork, efficient use of resources and clinical excellence.
The Design
Located on the hospital’s first floor, in addition to including the surgical, interventional and procedural rooms and their direct support spaces, the SIPC’s same-floor adjacency to critical in-patient beds allows immediate access for physicians to patients for after-care when necessary. Each area includes the following:

• **Patient Access and Pre-Procedure/Recovery:** Central to the SIPC and immediately adjacent to the arrival elevators and the primary public spaces, this area serves as a “filter” between the procedure spaces and inpatient spaces. In addition to the patient entrance and waiting areas, it includes:
  – 50 admit/recovery rooms, nine of which can accommodate inpatient stays.
  – A 14-bay post-anesthesia care unit (PACU).
  – A large conference room for staff meetings, educational programs and other events.
  – Four smaller meeting rooms for private consultations among caregivers or with patients and family members.
  – Staff lounge and on-call sleep rooms.

• **Procedural Platform:** The procedural areas, located immediately adjacent to the patient access and pre-procedure/recovery area for efficiency and patient safety, include:
  – Surgical Suite with nine operating rooms. (Eight are currently in use. Planning and infrastructure are in place for the ninth.)
  – A Heart and Vascular Suite with two cardiac catheterization labs, two VIR labs, and two minor procedure rooms.
  – A Gastroenterology Suite with seven endoscopy procedure rooms.
  – Central sterile processing.
  – Support Spaces, including Staff Lockers, Scheduling, and Management Offices.

• **Critical Inpatient Care:** The first floor of the adjacent in-patient tower is designed for easy and immediate access for patients transferred from invasive procedures. It includes the following bed compliment:
  – 12 intensive care (ICU) rooms.
  – 30 cardiac care (CCU) rooms.
  – Eight surgical intermediate care rooms.
  – An in-patient dialysis suite, with in-room dialysis in all critical care rooms.
PLANNING, DESIGN AND TEAM-BUILDING – AN EARLY START IS ESSENTIAL

Planning and designing the SIPC began years before the facility welcomed its first patients.

The planning and design effort was led by Kahler Slater in partnership with a Martha Jefferson internal operational redesign steering committee, chaired by Vice President and Chief Nursing Executive Amy Black, RN, DNPe, NEA-BC and consisting of Vice President and Chief Operating Officer Elliot Kuida; Vice President of Clinical Support Services/IT Marijo Lecker; Director of Performance Improvement Alison Hartman; Operational System Project Manager Laura Marin; and many others.

Early functional programming services and initial concept discussions about the SIPC model were provided by Navigant Consulting. In partnership with Navigant Consulting, Kahler Slater provided facility planning and design concept options to support operational improvement and process redesign.

In keeping with Kahler Slater’s project approach and design philosophy used in planning all areas of the replacement hospital, multi-disciplinary teams, including staff members from each of the services that would make up the SIPC, were intimately involved in all process discussions. Overall, more than 200 Martha Jefferson Hospital staff members served on 39 design teams.

“Not Our Idea”

The vision and direction for the SIPC was committed to by hospital leadership early in the process of planning the replacement hospital. But, while staff members in the affected departments recognized the opportunities that the approach offered for sharing resources, they had to be pushed through the planning and implementation process.

“It certainly wasn’t our decision to be on one platform,” said Director-SIPC Nancy Maloy, MSN, RN, NE-BC. “The concept was presented to us, and we had to operationalize it. We weren’t one big happy family to begin with.”

VIR/Wound Care Manager Mike Shields added, “We all went in kicking and screaming a bit. We had to make it work because it was the vision that our administration had. We made it work, we operationalized it, and it’s successful.”

Significant Challenges

The challenges in operationalizing the SIPC concept were great.

As distinct teams scattered throughout the old facility, the various departments had established their own ways of operating. These processes had to be reviewed, documented, and standardized across the SIPC.
"We had to have a common understanding of what each of the departments did and how we related – what we did similarly and what we did differently – so we could all be on one page," said PACU and Admit/Recovery Manager Sandra Fields, RN, BSN, NE-BC.

Physicians, accustomed to working with nurses who specialized in their area, were understandably concerned that their caregiver teams would include nurses who did not have that particular expertise, and who would be required to learn very quickly how to care for, educate and discharge their patients.

Pre-procedure/recovery nurses would need to broaden their skill sets exponentially. Rather than being responsible for patients from just one department, they would care for patients from four departments, and they needed to be prepared to handle the vast array of situations they would face. For example, the SIPC’s postoperative recovery rooms would not only receive surgical patients, but also patients recovering from endoscopies, cardiac catheterizations, ERCPs performed with anesthesia, and VIR cases requiring monitoring for bleeding.

Procedural nurses who had historically taken professional pride in seeing their patients through their entire visit – from pre-procedure work-up to the procedure itself, recovery and discharge -- would have to relinquish some of that control and learn to trust their colleagues who would be prepping, recovering and discharging their patients.

**Setting the Ground Rules**

Step one in overcoming these challenges was to establish a set of ground rules that would not only serve as the framework for the planning process, but also would help the departments come together as a cohesive team.

The steering committee set five goals:

- Create a consensus operating statement for the SIPC, including parameters for both patient and staff safety and quality, through sharing each other’s mission and vision.
- Insist upon impeccable teamwork and camaraderie among the departments that make up the SIPC.
- Develop a plan to operationalize the SIPC in the replacement hospital.
- Ensure that operating plans maximize the efficient and effective use of full-time-employee resources where functions overlap and can be consolidated given the new environment.
- Where possible, trial suggested changes in the old facility to test assumptions before moving into the replacement hospital.

The design team worked side by side with the operational teams to discover similarities and differences and designed a platform that allowed for efficient staff and patient flows to maximize patient safety and improved efficiencies. Flow diagrams were created and operational narratives were written and revised many times in an effort to get it right for all teams involved.
Few Models to Follow
The steering committee looked for success stories they could model the SIPC after, searching the literature and fanning out to tour facilities around the country. They quickly realized that, while others had integrated some similar services, none had taken the concept as far as the Martha Jefferson Hospital team thought they needed to go. No other facility had successfully operationalized something as ambitious as what was planned for Martha Jefferson.

“We never saw a facility where all of these invasive procedural departments were together in one platform, under one clinical leader,” Maloy said. Some institutions had grouped outpatient services together and inpatient services together, but those two larger groups remained separate. Larger academic medical centers had operationalized platforms encompassing their surgical, endoscopy and PACU areas, but the interventional departments remained separate. Other mid-sized facilities similar to Martha Jefferson Hospital had brought two departments together; endoscopy and surgery, for example, or cardiac catheterization and VIR. None had successfully created a platform encompassing four procedural departments.

Strong Leadership from the Top
Involvement by Elliot Kuida and others at the Vice President level was crucial to keeping the project on track and helping the team coalesce into “one big happy family.”

“Elliot wouldn’t let us fail,” Shields said. “He wouldn’t let us abandon the vision. If he hadn’t been in that position, I don’t think this would have ever happened. That’s why other organizations have struggled to operationalize this model; they didn’t have a champion at the executive level to pull it off.”

Maloy added, “We had to come to meetings. We had to come prepared. He kept us on task and would not let us back out of it.”

Consensus-Building
Building consensus among leaders in the four departments was a long, bumpy process, but one that had to be completed before the nitty-gritty planning and design work could begin. Kahler Slater guided the steering committee and the multi-disciplinary SIPC design team through extensive – sometimes contentious – discussions about the SIPC concept and the rationale behind it. Puzzle Play (2P modeling) was used to explore ways in which the SIPC could be organized to share resources, enhance connectivity, provide more ideal patient flows and reduce transport distances, illustrating the flexibility and efficiency it could offer.

By investing this up-front time and effort into building buy-in for the SIPC concept and the overall direction of the project, the team ensured that a costly and time-consuming re-design would not be required.

The effort paid off again when, partway into the design process, the Great Recession of 2008 hit. Funding for the replacement hospital became tighter, and the entire project was scaled back.
The SIPC had to become smaller and leaner.

“We went back to the drawing board,” said Katherine Schnuck, principal at Kahler Slater. “Together we found ways to keep the SIPC whole operationally and accommodate the same volume with fewer rooms than they originally thought they would need.”

**Staff Participation in the Planning Process**

Equally important to the SIPC’s ultimate success was the involvement of the clinical and operational line staff of the various departments in the planning process.

“ Their input was essential to us as leaders,” Shields said. “We may think that we know what goes on in the clinical areas, but we really needed people to say, ‘This is what really happens. This is what I need to make my job easier and improve our efficiency.’ We could sit back and guess all day, but they could provide that detailed information.” Involving staff in the process also helped engage them and alleviate concerns they may have had about the coming changes.

“Martha Jefferson Hospital leadership handled things very gracefully,” Schnuck said. “They are a very organized group. They asked the right questions. They got people on board, bringing them to the table and having them help set the plan for implementation.”

Nurses and other staff members helped diagram processes and workflows, ensuring that all steps were included. Their input also was crucial in development of the scheduling system and documentation tool used by all SIPC departments.

Kahler Slater worked with the SIPC team to develop mock-up rooms, constructed in the basement of the old hospital to maximize convenience for all staff to review and offer feedback. Nurses and ancillary staff role-played working in them and developed detailed workflow options which provided valuable feedback to the design team. Details such as the location of toilet room doors and headwall configurations were carefully analyzed for each type of patient room. Mock-ups were also done for specific materials, such installing several flooring options in the pre-procedure/recovery areas of the old hospital so nurses, other caregivers, and facility personnel could experience working on them and weigh in with their reviews.

The supervisor of central sterile and several staff members benchmarked hospitals in North Carolina and Maryland, touring the facilities, asking questions and soliciting the opinions of the facilities’ employees. The information they gathered greatly influenced the design of and equipment chosen for Martha Jefferson Hospital’s central sterile services.

Early benchmarking and role-play/mock-ups were critical components in getting the design right and maximizing the effectiveness of the SIPC.
Importance of Information Systems
A crucial hire for the SIPC staff was Applications Specialist Myrna White. She joined the team during the design process and played a key role not only in creating the infrastructure necessary to meet the SIPC’s basic computing and communication needs, but also in planning and implementing the procedure tracking and documentation systems.

“She became instrumental in helping us achieve our goals,” Maloy said. “She’s not a clinical person, but she is so strong that she helped us with staff training.”

Shields concurred, “We would have been dead in the water if we didn’t have her on opening day.”

Fields added, “She has the best understanding of how all of the departments work.”

Staffing Mantra – No New Full-time Employees
One of the most difficult aspects of planning the SIPC was the mandate that, even with 18,000 additional square feet to cover (a 17 percent increase to accommodate anticipated future volume growth), there would be no additional full-time employees. The biggest challenge was determining how many staff members – from nurses and other caregivers to registration people and administrative assistants – would be assigned to the pre-procedure/recovery area and then identifying whom those staff members would be. Some employees would need to move into new positions, and changing jobs would be a difficult process for some.

Some employees volunteered. In other instances, when an employee left through normal attrition, his or her position was not directly filled, but the headcount was transferred to another area. Most employees who were initially moved from specialty positions into pre-procedure/recovery have now settled elsewhere in the SIPC, either returning to the area where they previously worked or into another area that better fits their skill sets. Ultimately, an additional administrative assistant was added to support the new SIPC.

“We’ve gotten everyone into the right seats on the bus,” Fields said. “Some just temporarily took a seat they ultimately didn’t want, just so they could ride.”
KEY FEATURES AND TOOLS

A variety of design elements and operational tools and procedures have helped the four departments coalesce into a cohesive group and contributed to the SIPC’s success.

**Patient-Centered Design**
From the overall concept for the combined interventional platform to the final execution in layout, design and aesthetic elements, the SIPC was designed to enhance the patient experience. Aligned with the MJH vision, the SIPC offers patients and visitors a welcoming and comfortable environment that reduces anxiety and promotes healing. The lobby and other public spaces are relatively modest, with greater emphasis and budgetary priority being placed on the areas where patients, visitors and staff spend far more time – the patient rooms, procedure rooms and other clinical spaces.

The SIPC has more than double the number of pre-procedure/recovery rooms as the old hospital (50 vs. 19), reducing wait times and delays. Nurses can begin preparing the day’s second “wave” of patients sooner, without having to wait for the first group of patients to be moved to the procedure rooms and the pre-procedure/recovery rooms to be cleaned. This efficiency then continues throughout the day.

For patients who need the services of multiple SIPC departments within the context of a single procedure, the pre-procedure/recovery unit serves as a “home base.” For example, a patient may need to have a peripherally inserted central catheter (PICC), inserted prior to surgery. He or she would be admitted and taken to a pre-procedure/recovery room for an initial work-up, then to the VIR unit for insertion of the PICC line, then back to the pre-procedure/recovery room to await surgery.

Because the majority of patients who visit MJH for a procedure are outpatients and do not need inpatient care, procedural rooms are situated closest to the pre-procedure/recovery unit and farthest away from the inpatient rooms. In the event of a post-procedure complication, the patient can be quickly moved from his or her pre-procedure/recovery room and returned to a procedure room.

Over time, many patients will visit Martha Jefferson Hospital multiple times for different procedures. Bringing all of these departments together gives them the added comfort of going to the same place each time.

**Staffing Efficiency**
From the outset of the planning process, the teams recognized that having a shared pre-procedure/recovery unit for all four departments would lead to more efficient use of personnel – and that prediction has been borne out in a 23 percent reduction in overtime.

That reduction has been particularly noticeable in the Endoscopy, VIR and Cardiac Catheterization departments. Previously, these departments were officially open from 8:00 a.m. until 5:00
p.m., but nurses and other caregivers would frequently need to stay late as the final patients of the day completed their recoveries. The ambulatory surgery unit, on the other hand, was open until 10:00 p.m. With all departments sharing a pre-procedure/recovery unit, nurses are available to see the late-admit patients through to their discharge without incurring overtime.

Proximity and Flexibility of Resources
The shared platform also gives the departments many opportunities to share resources and adapt to fluctuating procedure volumes. The pre-procedure/recovery unit shifts room and staff assignments based on need. The unit is informally organized into zones, with patient rooms generally assigned to a particular specialty department and located nearest to that department’s procedure suite. But, when a department’s patient census spikes for a day, adjacent rooms can be used to manage the flow. And when a pre-procedure/recovery nurse in one zone is on vacation, a colleague who typically works in another area can fill in because the rooms and processes have been standardized across specialties.

The VIR team regularly uses cardiac catheterization lab rooms when performing minor procedures and uses the cardiac catheterization lab’s X-ray room on high-demand days. Similarly, the OR team has borrowed anesthesia equipment from the cardiac catheterization lab when its equipment was unavailable, and the OR and endoscopy teams occasionally share carts of equipment. This convenient and efficient sharing of resources would not have been possible in the old facility.

The immediate adjacencies for specialty departments in the new SIPC, allows anesthesia services to be provided in Endoscopy and the Cardiac Catheterization lab for the first time. Standardization of the operating rooms, which are outfitted with similar booms and video equipment, allows surgeries to be assigned to any available room. The scheduling process is faster and more efficient, and the rooms are safer and easier to reset because the layout is the same for all rooms.

Centralized Scheduling
Scheduling for all SIPC departments has been centralized in a dedicated office in the SIPC. All patients check in at the patient access desk. Most patients pre-register online, and registration stations are available for those who prefer to complete necessary information in-person.

Procedure Tracking System
Communication between the procedural departments and the pre-procedure/recovery team is absolutely essential. With a typical daily patient census of 60 and four procedural departments feeding into the pre-procedure/recovery unit, relying on the telephone is simply not an option. The SIPC employs a highly customized system to track a patient throughout his or her visit.

Milestones are set for each procedure, such as the patient’s check-in at registration, the completion of registration, and the patient’s arrival in his or her pre-procedure/recovery room. An intercom system in the patient room allows anesthesiologists and surgeons to push a button indicating that they have completed such in-room steps as marking the patient. The pre-procedure/recovery nurse then sets the “Patient Ready” event on the tracking board, alerting the procedural area that the patient is ready to be sent to the procedure room. The tracking board also is tied to the SurgiNet® Documentation system, which automatically sets events as patients progress from OR to PACU and displays these milestones on the tracking board for families to follow.

In developing the system, the SIPC team
started with an off-the-shelf system and worked with the vendor to make significant modifications to tailor it to their needs. Each department designed its own view of the board and determined how various events would be communicated between the department and the pre-procedure/recovery team.

“We pushed the system well past its intended limits and made it our own,” said SIPC Business Manager Tim Catlett. “The vendor said we’d done more with the system than anyone else had.”

**Procedure Documentation**

Going hand-in-hand with the procedure tracking system is a new, painstakingly detailed, digital documentation system.

Each department had well-established protocols that its caregivers followed based on the procedure being performed. With four procedural departments coming together in the SIPC, that would add up to nearly one thousand separate protocols. No pre-procedure/recovery nurse could possibly be expected to remember them all. The solution was to equip the nurses with a comprehensive database of highly detailed procedure protocols.

The relevant protocol is attached to a scheduled appointment in the documentation system. The nurse is then given, step by step, the series of tasks to be completed, from the basic admission assessment to such procedure-specific protocols as a reminder that the patient should consume no food or liquids, or a checklist of clothing that the patient must remove prior to the procedure.

The system took hundreds of hours to develop as the team meticulously flowcharted each procedure. Support from the information systems team was crucial as screens for each procedure were built for the digital database.

**Hands-On Cross-Training and Ongoing Collaboration**

Hands-on experience and strong rapport among the nurses has also been essential in providing the pre-procedure/recovery nurses with the cross-training they need.

As the SIPC was opening, the pre-procedure/recovery nurses spent time in each procedural area to observe and learn the ins and outs of each pre-procedure/recovery process. They brought with them a binder containing printouts of the relevant screens from the documentation system so they could follow along and see how they would properly document each step in the new system.

Procedural nurses also spent as much time as possible in the pre-procedure/recovery area, serving as a resource to the nurses during patient work-ups and discharges. These visits were extremely valuable not only in expanding the pre-procedure/recovery nurses’ skill sets, but also in building the relationships, communication and trust that would be essential to them working together.

These processes continue today. Many “tips and tricks” reference sheets have been created. New nurses hired for the pre-procedure/recovery unit spend time in the Endoscopy Unit and Cardiac Catheterization Lab early on. Physicians regularly give in-service presentations during staff meetings. Most important, strong nurse-to-nurse rapport has been established, with pre-procedure/recovery nurses not hesitating to call their colleagues in the procedural units to ask questions.

**Pre-Admission Patient Preparation**

The various procedural departments had strong, long-established pre-admission patient preparation processes, and those processes continue to be followed.

The surgical department has a team of pre-assessment nurses who work with patients to
ensure they are ready for surgery and educate patients and family members about the procedure and the recovery process. Procedural nurses from the VIR and cardiac catheterization/electrophysiology departments contact their patients by phone before their procedure to relay needed information, answer questions and provide final instructions. Cardiac catheterization/electrophysiology patients also come to the SIPC the day before their procedure to complete a 30-minute class that prepares them for the procedure and their at-home recovery.

**Scheduling, SIPC Layout, and Teamwork Support On-Time Starts**

On-time starts for surgeries and procedures have greatly improved since the move to the new facility, thanks to tweaks in scheduling processes and the SIPC’s efficient layout. The simple proximity between the operating suites and pre-procedure/recovery rooms has improved efficiency by significantly reducing the time required to transport patients between the two areas.

In the procedural departments, the biggest contributor to improved efficiency is the ability to move a patient to a pre-procedure/recovery room as soon as the procedure has been completed and the patient has returned to baseline. The pre-procedure/recovery nurses then see the patient through recovery and discharge while, relieved of that duty, the procedural nurses proceed to their next cases.

Patient check-in times for the first surgeries of the day are staggered based on the complexity of the planned procedure, ensuring adequate preparation time. Patients undergoing more complex surgeries arrive at 5:30 a.m. so they can leave admit/recovery by 7:05 a.m. for incision by 8:00 a.m. The second wave of patients checks in no later than 6:00 a.m. and leave admit/recovery at 7:20 a.m. for an 8:00 a.m. incision time.

The pre-admission process also was tightened to ensure that patients are given the correct check-in time. Patients typically receive three calls prior to their appointment – one for pre-authorization, one for registration and one for pre-assessment. Often patients would be given conflicting check-in times, resulting in late arrivals and, consequently, late starts. Now, only pre-assessment nurses (in the case of surgeries) or procedural nurses (in the case of VIR, cardiac catheterization/electrophysiology and endoscopy procedures) tell patients when they should arrive at the hospital.

VIR procedural nurses closely monitor the procedure tracking board. If pre-procedure/recovery is experiencing a backlog in preparing the first patients of the day, the procedural nurses will step in to help ready their patients, ensuring an on-time start.

The VIR team implemented two simple process changes that have contributed to a dramatic improvement in its on-time starts. First is a change in when pre-assessment phone calls are placed. In the past, patients were called the day before their procedures. This department’s patient population is relatively young, however, and many patients were not at home to take the calls. Now, calls are placed two days in advance, allowing time for patients to return the calls and helping ensure that they are ready for their procedures when they arrive at the hospital.

In addition, the VIR team determined that a certain procedure was consistently setting them behind-schedule. While the physicians liked the procedure to be the first of the day, the pre-procedure/recovery team struggled to prep the patients within the hour allotted. That procedure is now scheduled in the second wave of the day, giving the pre-procedure/recovery nurses sufficient time to prepare the patients.

Finally, immediate access to these areas from Central Sterile Services assures quick and efficient turnover of procedure carts and equipment behind the scenes.
PREPARED FOR CONTINUED SUCCESS

The SIPC’s design, and the teamwork built during the design and operationalization processes, have also set the SIPC up for continued success. The leadership team meets regularly to discuss how to improve educational programs, communication and processes.

Procedure volumes are expected to increase, and the SIPC has space to accommodate that growth. The essential mechanicals and infrastructure for the ninth operating room and for additional procedure labs in the VIR unit and Cardiac Catheterization Lab were installed during the original construction process. When the time is right, they can easily be brought into service.
Martha Jefferson Hospital, a century-old community hospital in Charlottesville, Va., was destined to outgrow its downtown location and was constrained by limited space and an aging infrastructure. In the 1990s, the decision was made to build a replacement hospital on an 84-acre campus on Pantops Mountain, just outside of town and within sight of Thomas Jefferson’s historic Monticello.

Martha Jefferson Hospital’s vision is to “set the standard for clinical quality and personal health care.” A Magnet Nursing Organization, its goal is to redefine community health care and become a national benchmark. Architecture and experience design firm Kahler Slater ensured this vision was met through every experience at the new campus, partnering with Martha Jefferson Hospital to design the 176-bed replacement hospital in a park-like setting that takes full advantage of the Blue Ridge Mountain views that inspired Jefferson.

The 540,000-square-foot hospital welcomed its first patients on August 28, 2011. In 2012 Martha Jefferson Hospital was named “America’s Most Beautiful Hospital” by Soliant Health, a leading specialty health care staffing provider and part of Adecco Group.
Smart Thinking. Beautiful Results!

Kahler Slater was founded in 1908 and has more than 100 professionals and offices in Milwaukee and Madison, Wis. and Singapore. The firm’s mission is to partner with visionary clients throughout the world to bring their visions to life through total experience design.

The health care team at Kahler Slater knows the issues facing clients today: you must be smarter, faster and leaner, improve clinical outcomes and achieve higher patient satisfaction scores, all in the face of a dramatically changing health care landscape and intense market competition. Team members enthusiastically partner with clients to face the future by designing health care experiences that are forward thinking, highly efficient and beautifully differentiating.

Kahler Slater is an industry leader: from being a Champion Firm for the Center for Health Design’s Evidence-Based Design Accreditation (EDAC) program; to being selected as an inaugural member of the Planetree Visionary Design Network (one of only 13 firms internationally); to being named a national Best Place to Work 10 years running.

Kahler Slater’s team of planners, architects, interior designers, clinicians, researchers, graphic designers and communications professionals work collaboratively to deliver smart thinking and beautiful results – every time.
From “Kicking and Screaming” to “One Big Happy Family”

For further information, please contact Jennifer Schlimgen, at (608) 227-7217 or jschlimgen@kahlerslater.com