

The Philips logo is displayed in a white rounded rectangle with a blue gradient at the bottom. The word "PHILIPS" is written in a bold, blue, sans-serif font.

Managed Services and  
Enterprise Partnerships

The GRHealth logo features the letters "GR" in a large, white, serif font, followed by "Health" in a smaller, white, sans-serif font.

GEORGIA REGENTS HEALTH SYSTEM

The background of the slide is a photograph of a business meeting. Several people in professional attire are gathered around a table, looking at a laptop. The lighting is bright and professional.

# Rethinking everything, **together**

## **GRHealth-Philips Alliance** Fiscal Year 2015 Annual Review

### **A first-of-its-kind alliance for innovative and affordable care**

In June 2013, Philips Healthcare and GRHealth announced an industry-defining alliance to improve the quality of care and reduce costs. Both parties understood that 'business as usual' could not address the dramatic changes in our industry. To deliver on the triple aim of quality, access, and affordability would require a flexible and innovative business model and a joint pursuit of innovation and excellence over the long term. We found ourselves pioneers in pursuit of a vision to create a better future for our patients, our staff, and healthcare delivery as we know it.

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GRHealth leadership team members: (L-R) Greg Damron, CFO; Dr. James Rawson, Chair of the Department of Radiology and Imaging; Tad Gomez, RPh, VP, Professional Services; Nancy Hannan, Philips Relationship Director for GRHealth.

# Executive summary and highlights



Nancy Hannan

Our journey to realize better, faster, less expensive healthcare at GRHealth made advances in four main areas in fiscal year 2015. After unprecedented equipment replacements and training of over 1,000 staff members in our first year, we sought deeper alignment in the areas of:

- Enterprise planning and strategy
- Process improvement
- Cross-functional and cross-departmental collaboration
- Innovation

These four areas structured our broader efforts for the year.

**Enterprise planning and strategy:** Our main enterprise priorities, like many institutions, were clinical growth planning, quality reprogramming, and enterprise throughput. Our clinical growth initiative involved bottoms-up analysis and engagement of all 15 clinical service lines and fostered needed dialogue about strengths, weaknesses, challenges, and opportunities to grow. Throughput teams identified and have begun to implement organizational and process changes needed to materially improve risk-adjusted Length of Stay. A thorough analysis of quality issues, including infection control and alarm management, has helped us identify and prioritize improvement initiatives.

**Process improvement:** Value stream mapping, utilization analyses, competency measurement, and forming a Program Management Office with Cerner were all steps in our journey of continuous improvement. These activities helped identify waste, determine more robust equipment management approaches, and strengthen communications.

**Cross-functional and cross-departmental collaboration:** Because our Alliance structure includes dedicated onsite staff, we have been able to connect individuals and teams in ways not possible in traditional, transactional relationships. Now, all our efforts include a Change Management leader from Institutional Effectiveness. Now, we roadmap and plan together with GRHealth's IT partner, Cerner, to establish one systems schedule. And for the foreseeable future, we will have Philips product teams working with GRHealth radiology, cardiology, emergency medicine, and other teams to develop next-generation products.

**Innovation:** As we begin our third year together, we are also excited about the foundation we have established for a structured joint Innovation program. Philips and GRHealth have agreed upon a program framework and are actively hiring innovation managers for select areas of joint need. Soon, we will be investing in truly transformative efforts to improve the delivery of care.



Kelley Connolly



Members of the Alliance team: (L-R) Kelley Connolly, Karen Phelan, Client Operations Manager; Gerald Tharpe, Executive Program Manager; Nancy Hannan.

Looking back, we are so proud of the progress in technology and training we've made in the last two years. But the achievement that is by far the most exciting is that our alliance model is creating an unstoppable culture of innovation and continuous improvement at GRHealth. Together, for the next dozen years, we will rethink *everything*, together. This publication is dedicated to the growing community of change agents aligned in support of that mission.

**Kelley Connolly**  
Senior Director,  
Philips Alliances

**Nancy Hannan**  
Philips Relationship  
Director for GRHealth



# The Alliance in action

## Profiles in collaboration and transformation

We are all struck by how rapidly our Alliance has transitioned from the board room to the bedside. What began as an idea about how a hospital system and a technology provider could better work together has become a powerful new way of working for hundreds of Philips and GRHealth professionals. Individuals at the heart of care have taken up the spirit and work of our transformation with such enthusiasm that it's hard to keep pace.

Within this partnership framework, a community of professionals with a tremendous diversity of talent is coalescing around common goals. From the award-winning new Children's Hospital radiology department to our world-class telemetry unit, from the way we're educating staff in cardiac ultrasound to the way we're improving care in Labor and Delivery, the people who make up this Alliance are rethinking everything, together.

Transformation at GRHealth is not just a management program: it's a groundswell. Fired by the progress we've made together, aligned by common goals, and bolstered by a strong spirit of teamwork, this community is engaged – and committed to keep the progress going.

Just as it's impossible to credit a particular instrument or section for a great symphonic performance, there is no way to fairly recognize all the people from GRHealth and Philips who have contributed to the efforts of our transformative partnership. The following profiles single out some of the exceptional examples of partnership that are transforming healthcare at GRHealth, but our appreciation goes out to all.



(Foreground, L-R) Shawn Vincent, Sr., VP Partnerships, International Healthcare & Strategic Affiliations;  
Dr. James Rawson, Chair of the Department of Radiology and Imaging.

# Partnering to improve care and reduce cost in respiratory therapy

**Jennifer Anderson**, Respiratory Therapy director at GRHealth, is a woman on a mission. The proud leader of 107 respiratory therapists, she is visionary and tireless in advancing an agenda of better respiratory care at GRHealth. And non-invasive ventilation is one of Anderson’s pet causes. Because of the risk of ventilator-acquired pneumonia (VAP) that invasive ventilation carries, Anderson champions non-invasive ventilation (NIV) therapy whenever indicated. With an average cost to GRHealth of 10 extra hospitalization days and \$100,000 per incident, VAPs carry a heavy price to both the health status of patients and bottom line of the hospital.

The ability to administer non-invasive ventilation – then ramp quickly to invasive therapy if a patient’s status changes – is actually a function of a ventilator’s software. Unfortunately, at GRHealth, budget realities had allowed for only partial upgrades to their ventilator fleet. Anderson knew what the department needed to standardize care, but the annual budgeting process had never allowed her to reach it.

**Beth Reposa**, Philips PCMS Account Manager and a former respiratory therapy manager herself, worked with Jennifer to gain a deep understanding of her practice and workflow challenges and to devise the best solution to meet her needs. To the surprise and delight of Anderson’s staff, Beth’s recommendation was long on practicality and clinical relevance – and short on selling them new Philips equipment. ■



(L-R) Jennifer Anderson, GRHealth Respiratory Therapy Director; Beth Reposa, Philips PCMS Account Manager.

“It was such a collaborative approach: that just doesn’t happen! It was like a breath of fresh air.”

– Jennifer Anderson, Respiratory Therapy Director, GRHealth



## Respiratory therapy

### The challenge

 While GRHealth had one primary ventilator platform, not all units were equipped with a comprehensive software package to provide all ventilation modalities. When a patient’s status changed for better or worse, without a fully-featured ventilator at the bedside to support that switch, RTs were forced to scramble to find and disinfect an available ventilator. Precious minutes were wasted, staff nerves were tested, and expensive disposables were consumed.

### The solution

 The business case the Philips account manager set forth proposed updating and standardizing their fleet of Maquet Servo I ventilators to provide all modes of ventilation: invasive, non-invasive, and CPAP modes for neonates. The Alliance moved forward with 60 software upgrades to the current Maquet ventilators (30 bi-vent, 17 NIV, and 13 nasal CPAP software enhancements). Further, the solution included the purchase of two CareFusion oscillators for the NICU to eliminate the high cost of rentals.

### The upshot

 This was a classic example of how things change when you move from a transactional relationship to a partnership model. In this case, the best solution for GRHealth at this juncture was not a Philips solution. Beth was committed to help find the best solution for our partner, regardless of the vendor. This partnership model aligns GRHealth and Philips incentives to let us consistently do the right thing for patients and staff.



Lewis Golden, GRHealth chief radiographer, shows a young patient how "CAT" scans work by using the new Philips Kitten Scanner.

## Partnering to create a patient-centered pediatric radiology suite

The success of the award-winning new CHOG (Children's Hospital of Georgia) Radiology department has created its own problems, jokes **Lewis Golden**, Chief Radiographer: "Now kids cry when they have to leave!"

A pioneer in patient- and family-centered care, GRHealth has long recognized the importance of including patients and families in the planning process. "So it was only natural to ask the experts – our young patients and their parents – when we embarked on the pediatric radiology redesign," said **Dr. James Rawson**, chair of the Department of Radiology and Imaging at the Medical College of Georgia. In addition, the project team worked closely with Philips technology specialists and patient experience design experts to implement efficient workflows and child-friendly solutions throughout the department.

With a host of new patient-centric improvements – an irresistible interactive video wall in the waiting room, a Philips Kitten Scanner that allows young patient to simulate CT (or "CAT") scanning with toy patients, and personalized lighting and music schemes in the high-tech imaging suites – the CHOG project team has much to be proud of in the new design. But the clinical team is quick to point out that the greatest benefit is CHOG's newly installed fleet of imaging equipment, which enables them to manage dose to limit their patients' exposure to radiation. *That's patient-centered care.* ■

### Children's Hospital of Georgia

#### The challenge

 The existing CHOG facility had not been renovated for 16 years. Its technology was dated, its workflows were inefficient, and the environment was not friendly to children, their families, or staff. The imaging equipment was still, in many instances, based on analogue technology. A lack of interactive accommodations made the environment drab and difficult for both patients and providers.

#### The solution

 A multidisciplinary team of experts collaborated to create a state-of-the-art children's radiology center, opening October 2015, that provides enhanced patient safety through lower dose, more efficient staff workflows, increased patient throughput, and major advancements in the patient experience.

#### The upshot

 It takes a village! When the Radiology team's vision for CHOG connected with targeted expertise from across the Alliance – onsite technical and consulting resources and program management support – the results exceeded expectations and garnered a Patient-Centric Imaging award from *Health Imaging* magazine. Ownership for the project's success is rightly shared by a community of care that never stops focusing on patients.



"Working with the Philips team and our patient advisors has given us an end product that I'm very proud of. Radiology can be a scary place. We've tried to replace the 'scary' with 'soothing,' and I'm excited to share that with our patients."

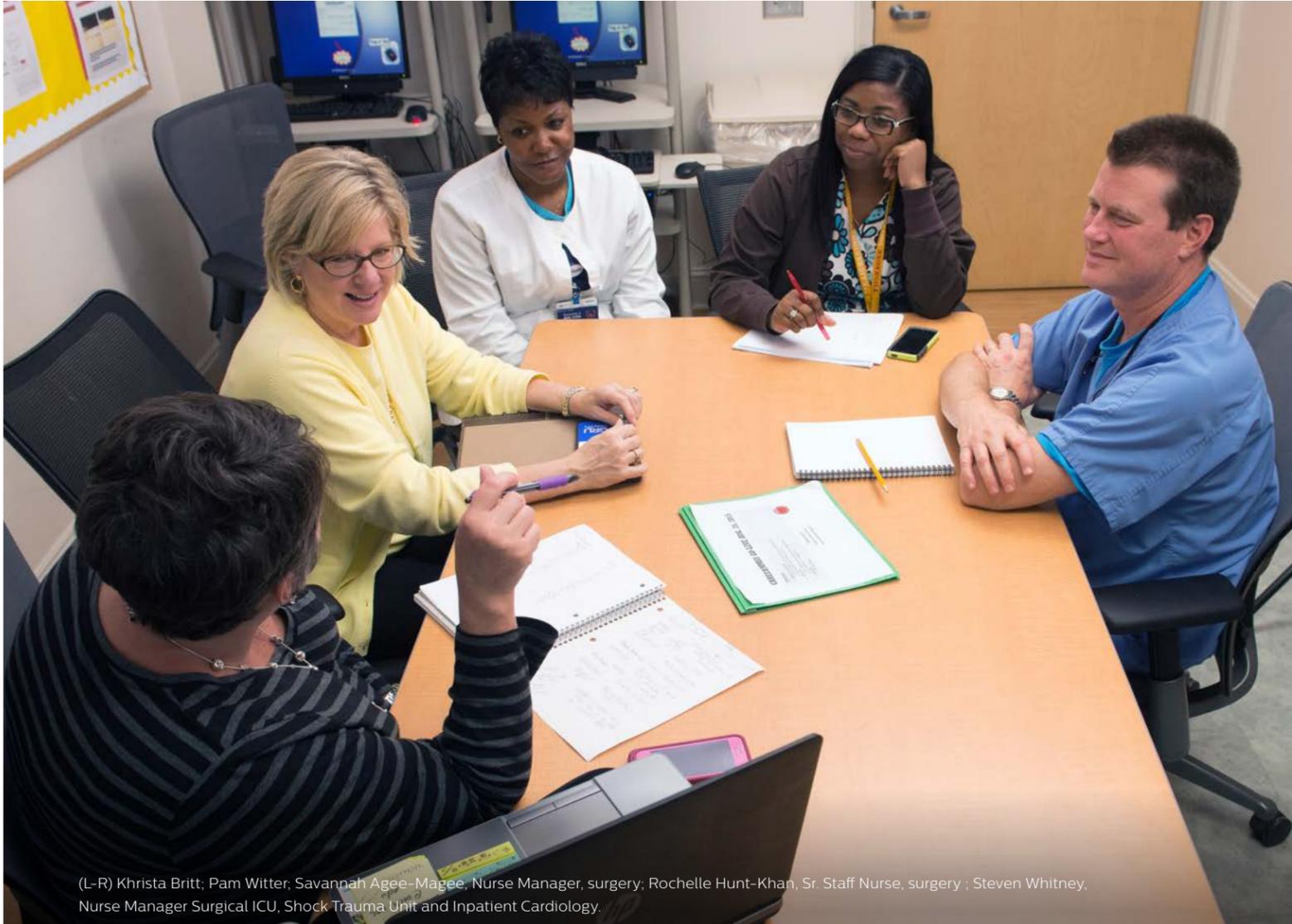
– Layne Mitchell, Administrative Director, General Radiology, GRHealth

# Partnering to promote sustainable change

Organizational change is hard. Extensive organizational change – on multiple fronts, with multiple vendors, involving new technology, workflows, and skills training – can be a recipe for disaster.

The breadth and extent of change undertaken at GRHealth in the first two years of the Alliance are formidable. But owing to highly skilled and coordinated change agents from both sides of the Alliance, change at GRHealth takes the form of an open, concerted, daily dialogue amongst all affected participants. In partnership with the GRHealth Institutional Effectiveness team led by change management specialist **Pam Witter**, the Philips project teams for major, concurrent clinical initiatives have been able to successfully prepare staff to adopt, optimize, and embrace the transformation – with no interruption to patient service.

With many major change initiatives behind them, Alliance leaders sometimes wonder how they did it all. But to those around the table, the formula for success is clear. By giving clinical staff a voice in the process and their tireless commitment to “translating” between technical and clinical groups, Witter and Philips clinical specialists like **Khrista Britt** have gained the trust of staff and created a powerful coalition for care innovation. That’s a change for the best. ■



(L-R) Khrista Britt, Pam Witter, Savannah Agee-Magee, Nurse Manager, surgery; Rochelle Hunt-Khan, Sr. Staff Nurse, surgery; Steven Whitney, Nurse Manager Surgical ICU, Shock Trauma Unit and Inpatient Cardiology.

“What I try to explain to the clinical staff is, ‘Just like you’re an advocate for your patients, I’m an advocate for you.’”

– Khrista Britt, RN, MSN, Philips Clinical Specialist



## Change management

### The challenge



Achieving sustainable benefit from improvement projects requires significant changes to technology, workflow, and organizational culture. When changes are introduced in a busy, resource-constrained clinical setting, it’s a challenge to prepare those who are impacted to embrace and model those changes for widespread adoption. Moreover, enterprise-wide transformation initiatives can cause confusion and disruption that jeopardizes their chance for success – and even patient care.

### The solution

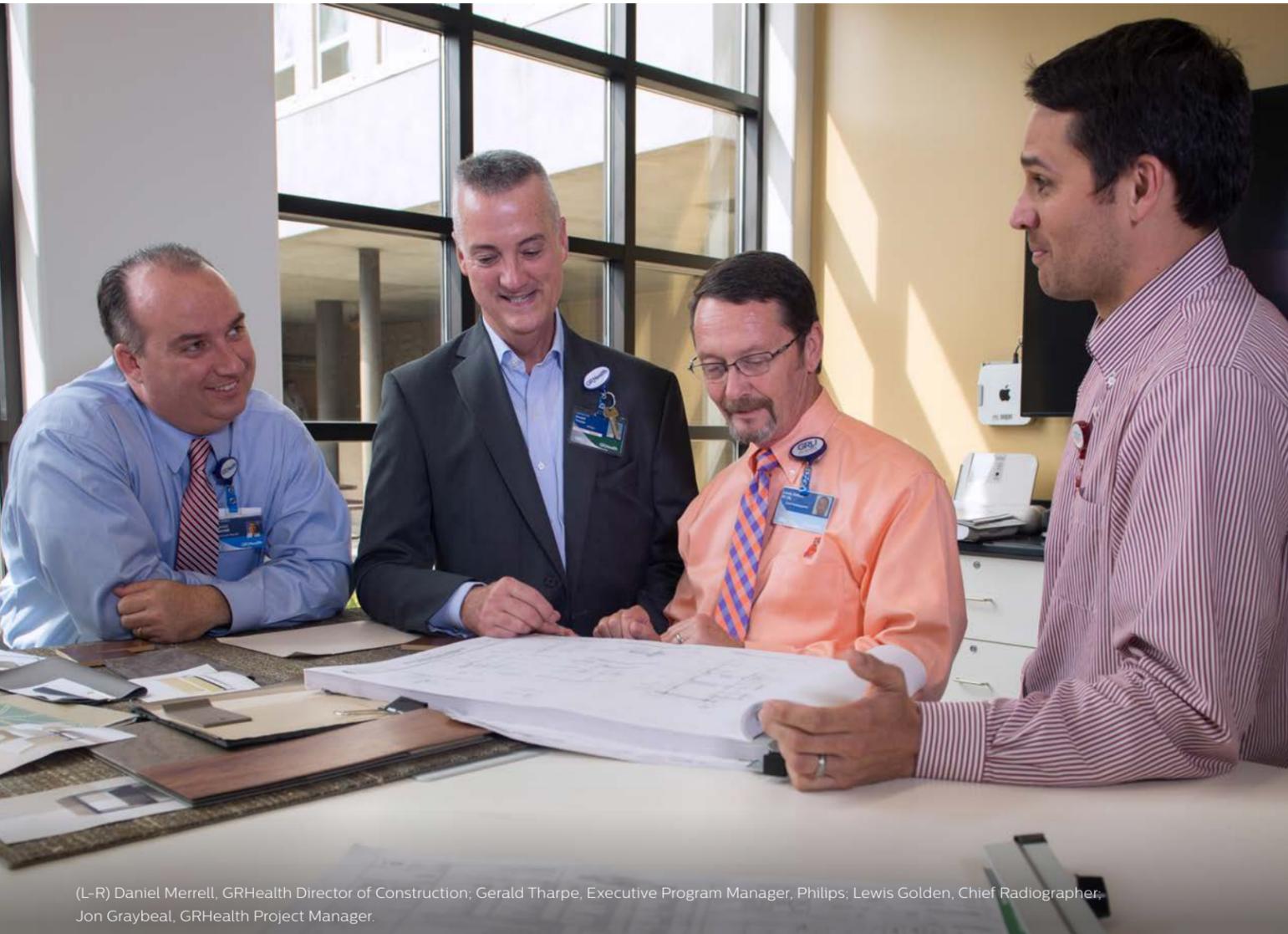


Partnering with the GRU Division of Institutional Effectiveness, the Philips project teams for Guardian, Bed Management, and Care Facilitation are working to minimize resistance and disruption and successfully prepare staff to adopt and embrace the changes. Engaging affected stakeholders in this way has not only eased and improved the implementation process, but created an ongoing forum for continued improvement.

### The upshot



The first year of our Alliance was characterized by extensive technology transformation, with over 800 pieces of technology upgraded and hundreds of staff trained. But the real power of our partnership model is what happens next, as we work together to make those changes sustainable and continue to improve and innovate. Our collaboration with Pam Witter is a great example of how that works on a daily basis.



(L-R) Daniel Merrell, GRHealth Director of Construction; Gerald Tharpe, Executive Program Manager, Philips; Lewis Golden, Chief Radiographer; Jon Graybeal, GRHealth Project Manager.

# Partnering to design a more patient-friendly environment

The facilities planning team is one of the unsung heroes of hospital operations. Charged with creating an efficient but soothing environment for patients, they are often at the tail end of the technology procurement process. Rather than creating an environment that's best for patients, they're often challenged with retrofitting space to accommodate technology adoption decisions that are out of their hands.

When Radiology decided to redesign its imaging suite for the Children's Hospital of Georgia (CHOG), it consulted Philips' design and patient experience experts at an early stage in the process. Based on best practices from its more than 500 global hospital customers, the Philips design team worked with the facilities team, architects, CHOG clinical experts, and patients and families to create patient-centric solutions that would make the new imaging suite a winner. They included such ideas as: make the reception desk "child height"; give children choices – of ambient lighting color and music theme – to personalize their experience; create

positive distractions, such as the interactive digital wall and the Philips Kitten Scanner to pass the time and provide a positive distraction.

By being integrated into the planning conversation at an early stage, the project team could focus more on patient-centered design and less on just "making things fit." Their efforts recently earned a Patient-Centric Imaging award from *Health Imaging* magazine. The real winners, of course, are CHOG patients, families, and staff. ■

## Planning, design and construction

### The challenge

 The facilities planning team of a hospital typically operates in reactive mode, asked to respond to last-minute needs and accommodate technology procurement decisions that are driven by disparate, uncoordinated groups. As such, they are often unsure of what projects are coming and when – and how they fit into their greater design plans for a patient-centric environment.

### The solution

 By coordinating with the Alliance team on a consistent, integrated basis, the Facilities team is able to achieve more consistent planning, projection, and project coordination across the enterprise. Additionally, they can take advantage of Philips' design expertise and online access to equipment specs. This level of collaboration takes a lot of the uncertainty out of the planning and sequencing of projects.

### The upshot

 One of the main benefits of a Managed Services alliance such as ours is the centralized, system-wide planning and implementation of technology. When planning is a concerted, multiyear process rather than an annual competition for resources, there are very few surprises for anyone in the value chain. Facilities can move from a reactive to proactive way of working, with an enterprise focus on improving the patient experience.



“The collaboration between Philips and our facilities planning group to make these projects more patient-centered has been outstanding.”

– Lewis Golden, Chief Radiographer, GRHealth

# Partnering to build a state-of-the-art telemetry program

When the Alliance team set out to update its remote cardiac monitoring (or telemetry) service, it took a holistic approach. Beyond upgrades to the latest Philips PIIC iX central station and MX40 patient-worn monitoring devices, they factored in staff efficiency and comfort, training, workflow, ergonomics, lighting, room design, and integration with the critical and acute care areas they support. Under the leadership of **Steven Whitney**, nurse manager of the Surgical ICU, Shock Trauma Unit and Inpatient Cardiology, and **Diana Minks**, Philips senior project manager for patient monitoring, the team laid out a plan to create the telemetry program of the future – without interruption to the existing one.

Technical and design consultants from across Philips helped upgrade equipment and design the new suite – from staff-friendly adjustable height desks to ambient lighting and device storage areas. Clinical consultant **Shirley Craft** led the extended team through a Lean ‘value stream mapping’ assessment that highlighted areas for process improvement. Onsite support from experts such as field service engineer **Scot Collins** and clinical specialist **Patrick Truitt** enabled the

clinical staff – particularly the physicians – to configure and utilize PIIC iX’s powerful data capabilities.

Comfortably situated in their new, world-class surroundings, the team is validating their initial workflow changes with the goal of further refinements. Today, they are fully engaged in the idea that improvement is a continuous process – and that hands-on support is usually just a short walk down the corridor away. ■

“I’ve managed telemetry projects all over the country, and what we’ve built together at GRHealth is a top-flight telemetry program.”

– Diana Minks, Philips Sr. Project Manager, PCMS



(L-R) Steven Whitney, Dr. Amudhan Jyothidasan, Cardiology Resident; Lisa Flournoy-Willis and Rekha Patel, Telemetry Monitor Technicians; Khrista Britt, Philips PCMS Clinical Specialist.

## Remote cardiac monitoring

### The challenge



Budgeting restrictions had prohibited the hospital from investing in its cardiac telemetry and patient monitoring service for years. As a result, its technology was outdated, its workflows were inefficient, and the actual space was cramped and uncomfortable. Because of their lack of resources, they were unable to expand their coverage of new units or hire new staff to help. Furthermore, clinicians could not take advantage of the powerful data and analytics capabilities offered in new versions of the monitoring platform.

### The solution



The GRHealth team – from clinical leadership to telemetry technologist – worked collaboratively with a range of Philips experts to upgrade their monitoring platform and patient devices, redesign a new space, and assess and revise their workflows for greater efficiency. They are now able to cover additional clinical areas and gain valuable insights from their monitoring data.

### The upshot



The Alliance financial model allowed GRHealth to make long overdue technology upgrades that enhanced the quality of their systems. But beyond the equipment upgrade, the onsite support helped train and transition the team to the new systems in an efficient and concerted way. Today, the team benefits from the easy availability of onsite clinical support, which lets them take advantage of the advanced tools and data capabilities in their new system.



(L-R) Ruth Wilson, Nurse Manager NICU, CHOG; Michael Myers, Assistant Nurse Manager 6N.

## Partnering as thought leaders in **alarm management**

The management of monitoring alarms has been getting increased attention from clinical and patient advocacy groups alike – and for good reason. Research has confirmed the negative impact of noise on patient satisfaction and care. “Alarm fatigue” from alarms that don’t require action can dangerously distract and desensitize clinicians to the ones that *do*. Moreover, alarms have been estimated to cost health systems \$1 to \$6 – and one to six minutes – per alarm in valuable nursing time and attention.

In June 2013, The Joint Commission approved a new National Patient Safety Goal on clinical alarm safety for hospitals. In response, the GRHealth leadership chartered a multidisciplinary Clinical Alarm Management work group. The group’s co-chairs – adult cardiologist **Dr. Pascha Schafer**, NICU nurse manager **Ruth Wilson**, and performance improvement specialist **Judy Gast** – wasted no time in establishing alarms as an organizational priority and setting out a plan of action. Philips senior consultant **Lisa Pahl**, who has spent much of her recent career focused on alarm management, was eager to lend her expertise and support.

The project team achieved strong results quickly, with a 32% reduction in non-actionable alarms in the first 3 months. Excited by their results, Lisa, Ruth, and Dr. Shafer have shared their comprehensive approach at several academic conferences. But they’re by no means satisfied: with a laser focus on continuous improvement, we can expect more insights from these ‘alarm busters’ soon. ■

### Alarm management

#### The challenge



GRHealth was looking to reduce their non-actionable alarms by 30%, decrease alarm fatigue, and create a holistic approach to alarm management.

#### The solution



Working in partnership with GRHealth clinicians, Philips clinical consultants analyzed alarm data and settings, interviewed staff, identified root causes on non-actionable alarms, and made several change and training recommendations. By implementing these changes in several pilot units, they were able to reduce the alarm levels immediately.

#### The upshot



GRHealth has achieved strong results quickly with a 32% reduction in non-actionable alarms in the first 3 months. To sustain and expand their success, the team is developing a new Clinical Alarm Management Policy that includes education, an implementation plan, monitoring guidance, and ongoing data analytics. Alarm data metrics are included in their monthly Quality Improvement dashboard to monitor results and identify future areas of concern.



Ruth Wilson and Lisa Pahl, Philips Sr. Consulting Manager, co-presented their results at the 2015 NTI Critical Care conference.

“The Alliance has been a refreshing approach to planning and implementing projects. With both teams working toward the same goals of quality and patient- and family-centered care, we have been able to streamline our processes.”

– Ruth Wilson, Nurse Manager NICU, Children’s Hospital of Georgia

# Partnering to enhance patient safety in labor & delivery

As a veteran nurse manager in GRHealth’s Labor & Delivery department, **Frankie Parks** is no stranger to high risk patients. But when L&D’s aging fetal monitoring system put her staff and patients at risk for losing data, she called upon Philips to help – STAT. Like other departments, L&D’s request for a technology upgrade – from their legacy 5-year-old surveillance and alarm system to the new version of IntelliSpace Perinatal – had been delayed repeatedly to support more urgent needs. But when staff concerns about losing data were confirmed by Philips systems diagnostics, it became clear to all that the upgrade had to happen ASAP.

“I feel like that’s when Philips really became our partner in getting this problem resolved,” said Parks. “They recognized that this was an important patient care issue, and they understood where we were coming from as nurses.” Account manager **Kevin Menges** escalated the issue to get emergency resources put on the project. Philips project manager **Robin Carrithers** worked intimately and tirelessly with the Philips technical staff, the GRHealth clinical staff, and with GRHealth’s IT partner, Cerner, to coordinate efforts across all aspects of the project.

The team got the new system installed, the patient data transferred, and all staff trained in a matter of 4-5 weeks. “I think it’s the fastest project of this type we’ve ever done,” said Menges. “Honestly,” Parks admits, “this could have had catastrophic consequences if it had not gone off so flawlessly.” Instead, it was another successful high-risk delivery – thanks to the teamwork and passion of these committed professionals. ■

“This was the most coordinated project I’ve ever seen in my 31 years here at GRHealth. Philips and the Cerner folks worked together to address a critical patient monitoring issue, and everyone was on top of it. Such teamwork!”

– Sue Ellen Abney-Roberts, Clinical Nurse Specialist, L&D, GRHealth



(L-R) Sue Ellen Abney-Roberts, Clinical Nurse Specialist; Frankie Parks, Nurse Manager, L&D; Kevin Menges.

## Labor & delivery

### The challenge



The patient monitoring systems in Labor & Delivery (hardware and software) had not been updated in more than 5 years. Moreover, they were not fully integrated with GRHealth’s Cerner EMR solution. As a result, the staff began to see signs of data leakage, and they were challenged to maintain high-quality documentation, especially in multiple birth cases.

### The solution



Understanding that patient safety and organizational risk were at stake, Philips marshalled emergency project resources to get the upgrade done ASAP. Working with the GRHealth clinical and IT staff (Cerner), a core team of dedicated Philips resources led a unified PMO team to upgrade, transition data, and train staff on the new system in a matter of weeks.

### The upshot



What was so special about this project was the way that all affected stakeholders worked together as a community of partners to respond to an urgent need. Not only was the unified team able to execute on the current challenge, but plans are under way to further integrate Philips’ fetal monitors with GRHealth’s Cerner EMR infrastructure. These efforts will further enhance and streamline complex staff documentation needs.



(L-R) Claude Terry, Philips Clinical Education Specialist CV U/S; Lindsey Couture, Lead Sonographer; Rhonda Cronan, Sr. Echo Cardiographer.

## Partnering to enhance clinical performance with education

When health systems adopt a new diagnostic technology, particularly one with as much potential as Philips' new EPIQ 7 3D cardiac ultrasound, it involves extensive training at multiple levels. Sonographers and cardiographers must become proficient, of course, but new skills and capabilities are also required of subspecialty physicians – cardiologists, radiologists, and even anesthesiologists.

At GRHealth, training and education are tightly integrated into the Alliance structure. **Ron Fiorucci**, the onsite Alliance education manager, oversees multiple education initiatives across the organization. So when the hospital decided to adopt EPIQ 7, Ron worked with Philips education experts and hospital staff to develop a comprehensive program that would train staff in a relevant, sustainable way. Their plan involved a 3-prong approach: clinical users' training for the technologists; peer-to-peer training with an eminent physician expert for the physicians; and advanced, post-processing innovations techniques for MDs seeking advanced proficiency.

"This training series would typically take a year to complete," insists Fiorucci. "But because we're *here*, we did it in 60 days." The success of the training far exceeded its efficient rollout, however: Just a day after the advanced training session, CMO **Dr. Kevin Dellsperger** was able to diagnose a challenging cardiac anomaly using the new technology and technique he had learned the day before. He's now in the process of publishing the innovation, and the case has been accepted for oral presentation at the 2016 SCMR Scientific Sessions Program Committee. Now *that's* the value of a good education. ■

### Cardiac ultrasound

#### The challenge



GRHealth's clinical leadership chose to adopt Philips' new EPIQ 7 3D cardiac ultrasound system and needed to train staff and physicians on how to use it. Fitting training into the busy schedules of most clinicians is a challenge. It's also challenging to make sure what they learn *sticks*, especially when it involves complex technology. Finally, in the case of a diagnostic modality, it's critical to train all levels of users concurrently in order to promote system adoption and proficiency.

#### The solution



Philips education experts worked with the hospital staff to develop a comprehensive program to train affected staff in a relevant, sustainable way. The plan involved a 3-prong approach including onsite clinical users' training: onsite peer-to-peer training with Dr. Stanton K. Shernan from Brigham and Women's Hospital in Boston; and advanced post-processing techniques for MDs. The comprehensive training plan was accomplished within 60 days.

#### The upshot



The success of Alliance education programs such as these is summed up best by Ron Fiorucci, the Alliance education manager: "We're here, we're accessible, we're flexible, we have easy access to the physicians and clinicians, and we listen to what they want and need from us." GRHealth clinicians agree: it's a formula for success.



Alliance education manager Ron Fiorucci with Dr. Sharma.

"I want to express my sincere thanks and gratitude to the entire team for doing an excellent job. It was the best course I have ever attended! It was equally beneficial to the physicians and technologists. We are already using it more than before."

– Prof. Gyanendra Sharma, MD  
 Director Adult Echocardiography Lab,  
 Cardiology Section, Georgia Regents  
 University

# Alliance year in review

## Working Group summaries

The governance structure of our Alliance provides us with a comprehensive framework for collaborative planning for the coming fiscal year. The Working Groups facilitate the development and implementation of the plan by reviewing, prioritizing, and managing the deployment of equipment, upgrades, service contracts, consulting, and innovation activities. The Working Groups report quarterly progress and provide an annual summary of key performance metrics and financial reports for the prior year. These reports are reviewed by the Joint Oversight Committee (JOC), and submitted to respective boards. Key learnings and best practices are identified and can then be incorporated into the coming year's plan. The following is a summary of the key highlights from FY15.



GRHealth's Chief Nursing Officer, Laura Brower, jokes with Chief Operating Officer Steven M. Scott.

### Technology

The **Technology Working Group** manages all equipment and software covered under the Agreement, ensuring that installations, upgrades, and replacements are prioritized and implemented based on sound clinical and business need, and that the necessary coordination and resources are made available. The group reports out on the financial value of these changes, including estimated financial and clinical impacts. In fiscal year 2015, GRHealth technology advancements focused on quality, safety, and patient- and family-centered care. Highlights include:

- Complete redesign of the Children's Hospital of Georgia (CHOG) Radiology Department, including the deployment of its newly installed imaging fleet
- Acceleration of key clinical initiatives, including a standardized ventilator fleet and ET<sub>CO<sub>2</sub></sub> (End-tidal CO<sub>2</sub>) monitoring capability
- Upgrade of monitoring and documentation platform in Labor & Delivery in collaboration with Cerner
- Completion of the transition from analog to digital radiology
- Expanded ability to wirelessly monitor ambulatory patients
- Advancement in clinical decision support for early recognition of subtle signs of patient deterioration
- Collaboration with GRU's Institutional Excellence team to coordinate change management efforts in hospital-wide technology projects

In addition to extensive technology improvements, the Working Group oversaw the delivery of thousands of hours of clinical educational programs. The programs were implemented with no interruption to patient care and no additional cost for temporary staffing.

### Technology projects completed in FY15

<b>TMP #</b>	<b>Ultrasound Systems – 11 projects</b>
134, 157	OR Ultrasound System
110	CVOR Ultrasound System
112	Echovascular Ultrasound System
116	Zonare Intravascular Ultrasound
135, 136	Intravascular Ultrasound – Adult Cath Lab
91-93, 168	Womens Health EPIQ Systems Ultrasound
<b>TMP #</b>	<b>CHOG Ambient Experience Systems – 6 projects</b>
185	CHOG CT & Dig Rad rooms w/audio Ambient Lighting and Sound
185	CHOG Kitten Scanner Pediatric CT Simulation
<b>TMP #</b>	<b>Digital X-ray/Fluro rooms – 9 projects</b>
38-41, 76-79	Adult, CHOG, and Wheeler Road Digital X-ray Systems
73	CHOG Digital Rad Fluoro System
<b>TMP #</b>	<b>Computed Tomography (CT) systems – 3 projects</b>
20	Adult/Trauma 256-slice CT
22	CHOG 256-slice CT
21	Interventional Radiology 128-slice CT
<b>TMP #</b>	<b>Non-Philips Imaging Systems/Projects – 5 projects</b>
	<b>Digestive Health Imaging Projects</b>
108	Hitachi Olympus Ultrasound System
160	OMEGA Fixed Procedure C-arm
	<b>Interventional Radiology/Cardiology</b>
162	Upgrade CHOG Bi-plane - Siemens
	<b>Bone Density DEXA machines (non-Philips)</b>
31	Rheumatology Bone Density System
32	Radiology Bone Density System
<b>TMP #</b>	<b>Patient Monitoring with Associated Products – 12 projects</b>
1002, 1003, 1006, 1008	Nursing central station replacements
1001, 1001.2	Telemetry (7N, 7W, 7S)
1002	Adult ED Patient Monitoring
1041	EKG Systems
1044	IntelliSpace Guardian Early Warning System
1052	Radiology Observation Patient Monitoring
1049	Patient Monitoring for Digestive Health

### Clinical education and configuration services

for FY2015 included:

- 300+ hours of clinical services to educate CT scan technologists on CT workflow and the use of the Philips 256 slice multi-dimensional iCT scanner
- 400+ hours of clinical services to educate the Radiology faculty, staff, and residents on digital diagnostic X-ray equipment to complete the transition from analog to digital radiology
- 95+ hours of clinical services for ultrasound education covering ten (10) new units installed in Radiology, US & EP Cardiology, Surgical, and Women's Health
- 300+ hours of clinical education and configuration services for the entire (900+) GRHealth nursing staff related to patient monitoring, including the development of best practices for EASI lead placement, baseline data collection for non-actionable alarms, and early detection of patient deterioration
- A Transesophageal Echo (TEE) course designed to provide GRHealth anesthesiologists, cardiologists, and cardiac sonographers with the skills needed to acquire and integrate high-quality, live 3D TEE images into their practice

### Performance improvement

The **Performance Improvement Working Group** identifies strategic, performance, and process improvement opportunities and is the channel for GRHealth leadership to request support for specific strategic, operational, and change management initiatives. This year's focus was to drive continuous improvement in quality and safety initiatives, as well as honing the strategy for growth within the health system. A comprehensive plan was developed and implemented to support clinical growth, increase patient throughput, and improve operational performance through quality initiatives. Results include:

- Operational plans developed to drive market growth in cardiothoracic, cancer, orthopedic, and pediatric services
- The development of an overall Strategic Growth Plan that includes performance improvement recommendations
- A toolkit to facilitate the evaluation of future clinical service reviews and support program development
- A full evaluation of patient throughput across the enterprise, from the point of patient access through to inpatient discharge, including care transitions outside the acute care setting
- A sustainable alarm management strategy driving a 32% reduction in non-actionable alarms in the first 3 months

### Equipment maintenance

The **Services Working Group** manages planned and corrective maintenance of equipment covered under the Agreement and is responsible for the continual optimization of existing equipment and services. This working group monitors key metrics such as equipment uptime, compliance with preventive maintenance requirements, evaluation of corrective maintenance measures, and the cost associated with parts and labor related to service. This year, the group measured the impact of equipment downtime by exploring the number of patient re-schedules. The analysis helped focus the priority of service in terms of care delivery as measured by the Imaging Department.

### Finance and operations

The **Finance and Operations Working Group** is responsible for establishing and tracking flex funds/pool usage, addressing invoicing, reporting, pro forma generation, and other financial administration activities. Each year, this group reports out on the changes to the Unitary Payment resulting from the agreed-upon changes across all activities.

### Innovation

The **Innovation Working Group** developed and gained approval for staffing, funding, and managing joint innovation. Both Philips and GRHealth are focused on staffing the team to begin to drive activities.

“With its strong overall performance and holistic approach to providing health solutions, Philips has earned Frost & Sullivan’s 2015 North America **Customer Value Leadership Award** in the **Managed Equipment Services** for hospitals market.”

– Frost & Sullivan

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## Profiles in partnership



If her employees' gratitude when she returned from vacation is any indication, nurse manager **Frankie Parks** is a pillar of strength in GRHealth's hectic Labor & Delivery department. Herself a mother of triplets – “They were more unusual then,” she insists – the 15-year veteran of the hospital has seen almost everything in L&D. Today, she explains, we have many more high-risk and multiple births than ever before. The special needs of those patients make monitoring and documenting increasingly important but complicated for her staff.

In between posing for our photo, Philips account manager **Kevin Menges** was eager to explain to Frankie how the planned installation of new Avalon FM fetal monitors will enable simultaneous triplet monitoring. Clearly delighted with the possibilities to continue to evolve care together, she declares, “This alliance with Philips is the best thing that ever happened to this hospital. All the other nurse managers think so, too!”



Delays in major construction projects are always disruptive, but when the project involves medical school lab space, the delay can disrupt the education of hundreds of medical students. **Becky Etheridge**, Director of Ultrasound Education for the GRU medical school, faced precisely that challenge when the opening of her new lab space, slated to be ready in July, was delayed until November. Without an alternate training area, students would have to postpone that important module of their curriculum.

Fortunately for her and her students, Chair of Radiology **Dr. James Rawson** made the connection to Philips' Education Manager for the Alliance, **Ron Fiorucci**. By “moving a few things around” – including training rooms, schedules, and lots of equipment – Ron was able to free up dedicated Alliance training space to accommodate the medical students. As a result, Becky was able to help 192 first-year students kept their education on track. “We couldn't have held the labs without their [the Alliance team's] help,” she said. “It was really a blessing.”

