What do the airline industry and healthcare have in common?
Highly Reliable Organizations Attain Successful Solutions

A mistake made by someone in the airline industry or the nuclear industry could mean a catastrophic accident: an airplane crash or a nuclear meltdown. Yet these industries have achieved exceptional safety records by radically reducing system failures and effectively responding to failures when they do occur.

The safety record in the airline industry has become so good that we trust them to fly us across the country more than we do to take our luggage.

Commercial aviation and nuclear power are significantly different than healthcare systems in critical ways. But these industries have adopted concepts of high reliability, and they can offer important learning to organizations like Beebe Healthcare that are pursuing substantial increases in reliability to further improve safety and quality for patients.

There are many challenges faced by industries like aviation and nuclear energy that are shared at Beebe Healthcare. Our environments are hyper-complex and depend on multiple teams to coordinate safety. Numerous decision makers are involved in a complex communication network, and communication and feed-
M. Fried, FACHE, President and CEO of Beebe Healthcare. “We believe that adopting HRO principles and systems is critical to achieving the safest and most effective care for our patients.”

BEEBE HEALTHCARE INITIATIVES

On the following pages, we will share with you some of the specific initiatives that are being pursued at Beebe Healthcare that depend upon participation of all staff members involved in patient care, whether they are physicians, nurses, respiratory therapists, technicians or dietitians. These initiatives give team members the opportunity to voice their thoughts and concerns so that collectively we are a stronger and more dependable organization for our patients, their families, and all of those we serve. We also share our Quality Measures results, which are available on the federal Centers for Medicare & Medicaid website at www.medicare.gov/hospitalcompare/search.html.

There is no room for mistakes when it comes to the care of our patients. We know that any error that leads to harming a patient is a catastrophe in his or her life,” says Jeffrey M. Fried, FACHE, President and CEO of Beebe Healthcare.

back must be frequent and immediate. And time is constrained, so processes must support quick decisions at the front line, not through a slow-moving hierarchy.

These challenges are being met by adopting characteristics of mindfulness unique to Highly Reliable Organizations (HRO). Launched at Beebe Healthcare in early 2013 under the leadership of Executive Vice President and Chief Operating Officer Paul Minnick, RN, MSN, NEA-BC, Beebe’s HRO strategy is to install five core concepts essential to Highly Reliable Organizations.

- **Sensitivity to operations**—preserving constant awareness of the state of the systems that affect patients. Acute, real-time awareness is key to noting and preventing risks.
- **Reluctance to simplify**—simplistic explanations, like “communication failure” or “inadequate training,” do little to identify true reasons that processes fail.
- **Preoccupation with failure**—A near-miss must be viewed as evidence of system failure, rather than proof that the system has effective safeguards.
- **Deference to expertise**—leaders and supervisors must be willing to listen and respond to the insights of staff who know how processes really work and the risks patients really face.
- **Resilience**—leaders and staff need to be prepared to respond when system failures do occur.

Donna Williamson scans all manufacturers’ medication information from the bar code into the automation robot. As an additional safety measure, Sam Roberts, RPh, MS, Director of Pharmacy, compares bar-coded information.
Team Members Identify Risks in Daily Huddles

Early each morning, the entire staff on a third-floor unit at the Medical Center in Lewes gathers in the hallway. Many of them are nurses. Some are respiratory therapists, registered dietitians, and speech-language pathologists. Secretaries and assistants also attend. They all have one thing in common: the safety of the patients.

The charge nurse has a clipboard on one arm and a pen in one hand.

“The charge nurse asks if they have any safety concerns,” says Margaret Porter, RN, Beebe’s Nurse Manager of the third-floor Medical-Surgical Unit.

On one particular day, a respiratory therapist points out that there is a device she needs that is not available on the unit. A nurse alerts the group that a patient admitted during the night has the same first and last names as an existing patient.

The charge nurse makes note of their comments, aware that her effort is part of a structured system that initiates immediate action by front-line staff to resolve those safety concerns. The needed respiratory device will be brought to the unit promptly and all unit staff giving care to the patients will be warned of the duplication of patient names and the necessary information to avoid any mix-up.

Staff gatherings like this take place every 12 hours throughout the Beebe Healthcare system, whether at the hospital, in the lab, or at the Tunnell Cancer Center. These gatherings are called “safety huddles,” first instituted at the hospital on the nursing units in April 2013.
They have proved so effective at identifying and resolving safety risks that in the fall of 2013 they were initiated in all patient care and operation areas, explains Mike Knapp, RN, MSN, NEA-BC, Director of Nursing.

“We use daily safety huddles to identify problems so that they can be addressed promptly,” Knapp says.

Safety huddles represent an implementation of the principles of Highly Reliable Organizations (HRO). They are the manifestation of Beebe’s preoccupation with failure. Safety huddles create a real-time channel for the experts at the front line of care to identify and resolve potential risks to patients.

As the group members discuss their concerns, the charge nurse fills out the “Daily Safety Huddle Record.” On this sheet are five questions that the charge nurse asks the group:

1. What is going on today?
2. What are the safety issues you have experienced in the last 12 hours?
3. What safety issues do you anticipate in the next 24 hours?
4. Do you have what you need to do your job today?
5. Is there anyone you would like to recognize?

These “Daily Safety Huddle Records,” which make note of each issue and coinciding resolution, are collected, documented, and then reviewed by the Quality and Safety Steering Committee, of which Knapp is a member.

“Everything is noted. After risks have been resolved, we can track trends and make sure that all processes and procedures are streamlined and consistent.”

**Pharmacists Focus on Risk Prevention**

**BASING PHARMACISTS IN THE EMERGENCY DEPARTMENT**

It is not uncommon for patients arriving to a hospital emergency department to be unsure of what medications they take and why they take them. How many times have we heard someone say, “Oh, I take a pink pill for my . . .” or, “The doctor told me to take . . . , but it makes me sick so I don’t take it. No, I haven’t told my doctor. I need to call him?”

In fact, a two-month study in early 2013 that Beebe pharmacists performed revealed that 45.4 percent of the medications newly admitted patients listed were either an incorrect dosage or a duplication of the same drug under a different name, or there was an important medication missing altogether.

In other words, nearly half of the medications listed by the 791 people admitted to the hospital during the study period were wrong, before the patients ever entered the hospital.

Pharmacy Director Sam Roberts, RPh, MS, says it is a national problem, not just a local one. Because of this, Beebe has joined the U.S. Government and other healthcare providers in promoting “medication reconciliation,” healthcare industry jargon that means making sure that people keep their list of medications up to date so that they always know what medications they take, how much they take, and why.

This is the reason why doctors and other healthcare providers ask patients at each visit what medications they are taking. But the problem is that it is not always easy for people to remember. Ordering medications online and then buying others at the local pharmacy make it even more complicated to remember. What’s worse, many similar medications go by
different names. Also, when a patient’s health changes, such as when blood pressure increases or decreases, or when heart failure or COPD worsens, medications no longer work the way they used to.

Beebe Healthcare, recognizing this problem, in 2013 began basing pharmacists in the Emergency Department. These pharmacists talk to patients admitted into the hospital to get information about what medications the patient is taking and why. They also use a computer program to research what medications the patient recently filled outside of the hospital before being admitted. Then, the pharmacists work closely with the hospital doctors and nurses to continually monitor the patient’s condition, treatment, and medications while they are in the hospital. This example of an HRO initiative not only identifies potential risks, but also supports the collective effort of the patient and the doctors, nurses, and other healthcare providers, as well as family and caregivers, to make sure that patients receive the best medical care.

“Our initiative is showing positive results,” says Beebe pharmacist Will Albanese, PharmD, who has been leading up the project. “Our medication reconciliation process is nearly 100 percent with all of the patients in the hospital.”

### Results from an In-house Pharmacy Study

**Study Period:** January 7, 2013, to March 7, 2013 (2 months, staffed for 41 days)

- **NUMBER OF PATIENTS SEEN:** 791
- **AVERAGE PATIENTS PER DAY:** 19.3
- **TOTAL MEDICINES REVIEWED:** 7,624

The table below shows where the errors occurred.

<table>
<thead>
<tr>
<th></th>
<th>Missing Medicines</th>
<th>Extra Medicines</th>
<th>Incorrect Dose/Frequency</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>1,959</td>
<td>309</td>
<td>1,196</td>
<td>3,464</td>
</tr>
<tr>
<td>Percent</td>
<td>25.7%</td>
<td>4.1%</td>
<td>15.7%</td>
<td>45.4%</td>
</tr>
</tbody>
</table>

45.4% of medications had errors on them at admission.

---

As the number of patients needing back surgery in the community has increased, Beebe’s three Board Certified spine surgeons—L. William Pfaff, MD; Ronald Sabbagh, MD, Beebe Healthcare Chief of Surgery; and Ronald J. Wisneski, MD—have been collaborating with the surgical staff to continually improve and expand Beebe’s Spine Surgery program.

“We make sure that we have properly conceived surgical interventions based on clinical, best-practice guidelines,” Dr. Wisneski says. “We provide individualized plans for each patient to return to a normal lifestyle.”

Two components of the spine surgery program exemplify a Highly Reliable Organization in which the surgical team is acutely aware of the risks involved in any operation. One is the team’s committed participation in the “Time Out” protocol. Beebe several years ago incorporated the World Health Organization’s surgical safety “checklist” procedure into its “Time Out” protocol. This is a pre-procedural pause in which all members of the surgical team take a few minutes together to go over a safety checklist to assure a safe surgery for the patient.

Dr. Wisneski, who joined Beebe earlier this year, has brought with him a “Time-Out” protocol he coined APPLE PIE. It gives the surgical team an easy-to-remember acronym that summarizes the important details the team needs to double-check before surgery to avoid surgical mistakes. (See page 7 graphic.)

Another example of an HRO concept is the implementation of the new spine surgery patient education class. Similar to the longstanding class Beebe offers for joint replacement patients, this class focuses on the safety of the patient. Orthopaedic nurse Melissa Heldreth, RN, ONC, who teaches the single-session class, wants to make sure that patients know what to expect and what to do to recuperate as quickly as possible.

Orthopaedic nurse Melissa Heldreth, RN, ONC, teaches the weekly class for patients having spine surgery.
“We want the patients to be prepared so that they know what to expect and can proactively participate in their recuperation,” Melissa explains. Highlighted in the education program is infection prevention and what steps patients should take.

“For example, we tell them not to sleep with their pets during the recovery process,” she says. “Pet owners often don’t realize that it is an infection risk to have an animal on the bed.”

Beebe’s Spine Surgery program has been recognized by Healthgrades® in recent years. For example, for 2012, 2013, and again for 2014, Beebe has been one of Healthgrades America’s 100 Best Hospitals for Spine Surgery™. For 2014, it also received the Healthgrades Spine Surgery Excellence Award, which ranks Beebe in the top 5% in the nation.

SURGERY AT BEEBE HEALTHCARE

According to the September 2013 issue of Consumer Reports magazine, Beebe Healthcare is the safest hospital in Delaware to have a surgery.* This recognition reflects the continuous focus on surgical safety that has been occurring at Beebe, where safety protocols have been established throughout all aspects of care for surgical patients.

Beebe participates in the Surgical Care Improvements Project (SCIP), a national quality improvement program aimed at significantly reducing surgical complications. This program, pioneered by The Joint Commission and aligned with the Centers for Medicare & Medicaid Services (CMS), strives to reduce specific complications related to surgical procedures.

Beebe has an extensive surgical program in which operations are performed both in the traditional open method and in the minimally invasive methods, including laparoscopy and endoscopy. Beebe has received quality ratings for orthopaedic, cardiac, and vascular surgeries. It offers some of latest cancer surgeries, such as those for pancreatic cancer, as well as the routine surgeries, such as for the removal of gallbladders and the repair of hernias.

Last year, more than 13,000 surgeries were performed in Beebe’s 12 operating rooms by highly skilled and specialized surgical teams.

*Surgical Time Out

Spine surgeon Ronald J. Wisneski, MD, coined this time-out “Apple Pie” as surgical team members go over a surgical checklist to make sure everything is in order before they begin.

*In the September 2013 issue of Consumer Reports magazine, 2,463 U.S. acute-care or critical-access hospitals are rated according to how well Medicare patients 65 years of age and older fared following surgery between 2009 and 2011. The ratings consider how well hospitals avoided adverse events that lead either to patients staying longer in the hospital for a procedure than expected, or to patients dying. Medicare claims data from 27 categories of common surgeries was analyzed. Beebe received the only above-average rating in Delaware. Details can be found at www.ConsumerReports.org/hospitalratings, where the question is asked, “How Safe is Your Hospital?” A subscription is necessary to view the full report.
Frank Young, of Lewes, says he is enjoying life and riding his bicycle following his open-heart surgery at Beebe.

Frank Young, of Lewes, says he is enjoying life and riding his bicycle following his open-heart surgery at Beebe.

CARDIAC SURGERY AT BEEBE HEALTHCARE
THE MOST COMMON OPEN-HEART SURGERIES PERFORMED AT BEEBE:
- Coronary Artery Bypass Grafting
- Aortic Valve Replacement
- Mitral Valve Repair and Replacement
- Tricuspid Valve Repair
- Aortic Aneurysm Repair
- Aortic Dissection Repair
- Pericardial Window for Pericardial Effusion
- Pulmonary Vein Isolation for Atrial Fibrillation
- Catheter-based Treatment of the Great Vessels
- Open Surgery of the Great Vessels

ALWAYS DIAL 911 FOR LIFE-THREATENING EMERGENCIES.
Fixing a Broken Heart

To meet Frank Young, you would never think there was anything wrong with his heart. He’s a young and fit 47. He lives on Lewes Beach in an ancestral home with his wife Eileen and six kids, all “Beebe babies.” When he is not working at his engineering firm in Dover, or spending time with his family, he is on his bicycle burning up the roads.

He and his bicycle sped over 2,300 miles from February 1 to September 17 of this year, to be exact. More miles of road have been burned by his tires since.

But it hasn’t always been that way for Frank.

“I didn’t always take care of myself,” he admits. “I used to be sedentary and have a poor diet, eating cheese steaks and strombolis. I was definitely overweight. You wouldn’t recognize me.”

Then Frank had a life-threatening heart attack. It was in July of 2011.

“I had a weird crunching sensation in my chest,” he recalls. “I went to Beebe.”

Frank was quickly taken from the Beebe Healthcare Emergency Department to the Cardiac Catheterization Lab, where interventional cardiologist Mouhanad Freih, MD, performed the procedure to open the blocked coronary arteries in Frank’s heart so that the blood could flow once again. His left anterior descending coronary artery (LAD) was 90 percent blocked, he says, and Dr. Freih placed four stents in his arteries.

“I had not been to a doctor with any regularity before that,” Frank admits. No one knew his arteries were clogging and that he was developing heart disease.

Once he recuperated, he focused on being healthy. He went to the gym, lost 70 pounds, and started his new biking regimen. Hard. Fast. Long distances. He pushed his body to the extreme.

On Christmas Eve, he had some chest pain. He felt light-headed and short of breath. When the symptoms worsened after he worked out, Eileen took him to the Emergency Department. He was having another heart attack. Ehtasham Qureshi, MD, Medical Director of Interventional Cardiology, performed an angioplasty to open the blocked coronary artery. That afternoon Dr. Freih, now Frank’s cardiologist, recommended that Frank have cardiac bypass surgery.

Opening Up His Heart

Frank admits that he was afraid to have the surgery at Beebe, thinking he may need to go to a metropolitan medical center. He understood the operation needed to be done within the next few days. Then he met cardiothoracic surgeon M. L. Ray Kuretu, MD, Medical Director of Cardiothoracic Surgery at Beebe Healthcare.

“When I asked if my particular situation caused him any concern by doing the operation at Beebe, he quickly and confidently answered no,” Frank recently wrote in a Beebe Medical Foundation letter encouraging people to donate to Beebe Healthcare. “When I asked about his previous experience with cases like mine, he informed me he has performed about 6,000 surgeries like the one I was about to have. As an engineer, my mind quickly went to the numbers: 6,000 operations, one per day, with no days off, is nearly 17 continuous years of operating.”

Frank didn’t look back.

“Because I am so active, Dr. Kuretu told me that he gave me a young man’s heart,” Frank says, explaining that Dr. Kuretu created surgical bypasses for four arteries, all of which were showing signs of blockage (quadruple coronary artery bypass grafting, or CABG).

Frank went home from the hospital after two days. As the determined man he is, he walked one mile before the end of the week. He did wait for another eight weeks before he hit the roadways with his bicycle. However, during those eight weeks he was vigorously riding his stationary bicycle at home.

As he enjoys Christmas with his family this year, Frank says he will remember the experience and be thankful to be alive and healthy, and to have a top-notch medical facility so near his home. Beebe Healthcare thanks Frank Young for sharing his experience with all of us. We are proud to bring a comprehensive heart program that provides life-saving care to those who live and work in our area. We also are proud of our Beebe Healthcare team that puts the patient first and is committed to making Beebe a top-notch healthcare system.

Cardiothoracic surgeon M. L. Ray Kuretu, MD, performs open-heart surgery with assistance from Cardiac Surgery Team members.
Evelyn Wilson, President of Coverdale Crossroads Community Center, guides Esther Sutton (left) and Wanda Lofland (right) on how to eat healthy.

Let’s Get Moving!

Evelyn Wilson knows that many of her neighbors are overweight and consequently struggling with Type 2 diabetes. She also knows that with some nutritional education and more exercise, they could feel a lot better and avoid worsening health problems.

“We are eating more turkey and cutting out the pigs’ feet and chitlins,” she says, admitting that she herself has had a weight problem. “At first no one wanted to eat a turkey burger, but we are starting to like them.”

Evelyn is the President of Coverdale Crossroads Community Center, located in a low-income and primarily African-American neighborhood near Bridgeville. She also coordinates programs to improve the health and well-being of the local adults and children. Evelyn’s observations are supported by fact. According to information reported by the State of Delaware, about 34 percent of African Americans in Delaware are obese, compared to 27 percent of the state’s population.

Obesity is a known risk factor for diabetes, heart disease, and cancer.

“I get them moving,” Evelyn says. “We have exercise equipment and all kinds of exercise programs for adults and kids. We also have our after-school program.”

Evelyn Wilson is a vocal advocate about teaching people how to eat healthy and exercise so that they can prevent diabetes and heart disease to improve the quality of their lives.
She offers several nutritional classes, and her neighbors are learning how to cook foods that are low in fat, sugar, and salt. She follows the U.S. Department of Agriculture’s My Plate program that encourages fresh fruits and vegetables. Evelyn also works closely with the Delaware Food Bank to have their programs available to residents. She also works with the Diabetes Prevention Coalition, organizes life-skills classes offered by Delaware State University Cooperative Extension, and, to prevent illness, Evelyn organizes regular health screenings for diabetes, heart disease, and cancer.

“Beebe nurses come whenever we ask them to do screenings here,” she says, referencing both Community Health nurses and Tunnell Cancer Center’s cancer screening nurses.

“We know that people do much better if diseases are caught in the early stages,” she says.

**BEEBE’S COMMUNITY HEALTH NEEDS ASSESSMENT**

So in the summer of 2012, when Beebe initiated its Community Health Needs Assessment, Evelyn was among the hundreds of stakeholders, focus groups participants, and community members throughout Sussex County surveyed about their thoughts on the county’s greatest health needs.

The purpose of the assessment was to develop a fuller understanding of the health needs in the towns and neighborhoods throughout Sussex County, and to guide the planning for programs to meet those needs. It was already known that the federal government has designated Sussex County a Health Professional Shortage Area (HPSA) for primary and dental care. But the survey of so many people, including those with county and state organizations, health organizations, senior centers, community organizations, and veterans groups, was able to detail many other specific areas of concern.

“The assessment enables us to gain a better understanding of the health needs of vulnerable or underserved populations and then develop a plan that will guide future community benefit programming,” explains Megan Williams, FNP, Director of Population Health for Beebe Healthcare. “Beebe will use the report as a road map, collaborating with strategic partners to address identified priorities.”

Mrs. Williams emphasizes the need for collaboration and points out that Beebe’s Community Needs Assessment report, published in June of 2013, is available on the state’s Delaware Health Tracker website together with the reports by Bayhealth, Nanticoke Health Services, and Christiana Care Health System. The Delaware Health Tracker website provides information on the health of people in Delaware. It can be accessed at www.delawarehealthtracker.com.

For Evelyn, participation in the Community Health Needs Assessment survey gave her and her community a voice.

“This has been wonderful for our residents,” she says. “When they are asked what they want, they buy into the workshops. So many residents are older now and concerned about their health. They want to know more about diabetes and cancer.”

Evelyn says that some recent workshops Cloverdale Crossroads Community Center is offering, such as those on healthy cooking and education about prostate cancer, were initiated in response to the results of the survey.

“People want to learn. They want to know what they can do to be healthy.”
Hospital Quality Measures

The federal Centers for Medicare & Medicaid Services (CMS) requires hospitals to report on their performance in treating patients with heart attack, heart failure, pneumonia, preventive care, and those who undergo surgery (surgical care improvement). CMS uses this detailed, documented patient-care information to gauge how well hospitals throughout the nation perform in these categories. CMS then takes these measures and translates them into a rate or percentage. This allows each hospital, and all consumers, to assess a hospital’s performance compared to other hospitals. These measures are available on the government website www.hospitalcompare.hhs.gov.

The Joint Commission has recognized Beebe Healthcare, an accredited hospital, for attaining excellence in accountability measure performance during calendar year 2012. As a Top Performer on Key Quality Measures®, Beebe Healthcare is among the top 33 percent of all Joint Commission–accredited hospitals that reported accountability measure performance data for 2012. These hospitals can be found at the following website: http://www.jointcommission.org/assets/1/6/2012_Top_Performers__list.pdf.

Beebe Healthcare would like to share some of our Quality Measures results on the next page.
### SURGICAL CARE IMPROVEMENT
**MEASURES USED TO EVALUATE PATIENT CARE**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Bebee Average</th>
<th>Delaware Average</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of outpatients having surgery who got an antibiotic at the right time (within one hour before surgery).</td>
<td>99%</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Percent of surgery patients who were given an antibiotic at the right time (within one hour before surgery) to help prevent infection.</td>
<td>100%</td>
<td>99%</td>
<td>98%</td>
</tr>
<tr>
<td>Percent of surgery patients whose preventive antibiotics were stopped at the right time (within 24 hours after surgery).</td>
<td>100%</td>
<td>99%</td>
<td>97%</td>
</tr>
<tr>
<td>Percent of surgery patients who got treatment at the right time (within 24 hours before or after their surgery) to help prevent blood clots after certain types of surgery.</td>
<td>100%</td>
<td>98%</td>
<td>98%</td>
</tr>
<tr>
<td>Percent of outpatient surgery patients who were given the right kind of antibiotic to help prevent infection.</td>
<td>99%</td>
<td>98%</td>
<td>97%</td>
</tr>
<tr>
<td>Percent of surgery patients who were taking heart drugs called Beta Blockers before surgery, who were kept on the drug during the period just before and after surgery, making it less likely that they will have heart problems.</td>
<td>99%</td>
<td>96%</td>
<td>97%</td>
</tr>
<tr>
<td>Percent of surgery patients who were given the right kind of antibiotic to help prevent infection.</td>
<td>100%</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>Percent of all heart surgery patients whose blood sugar (blood glucose) was kept under good control in the days after surgery to lower the risk of infection.</td>
<td>99%</td>
<td>99%</td>
<td>96%</td>
</tr>
<tr>
<td>Percent of surgery patients whose urinary catheters were removed on the first or second day after surgery.</td>
<td>100%</td>
<td>97%</td>
<td>96%</td>
</tr>
<tr>
<td>Percent of patients having surgery who were actively warmed in the operating room or whose body temperature was near normal by the end of surgery.</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Percent of surgery patients who had blood clot prevention ordered after certain types of surgery.</td>
<td>100%</td>
<td>98%</td>
<td>98%</td>
</tr>
</tbody>
</table>

### HEART FAILURE
**MEASURES USED TO EVALUATE PATIENT CARE**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Bebee Average</th>
<th>Delaware Average</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of heart failure patients given instructions to help understand and manage the symptoms of this chronic condition.</td>
<td>97%</td>
<td>94%</td>
<td>93%</td>
</tr>
<tr>
<td>Percent of heart failure patients given an evaluation of left ventricular systolic (LVS) function. This is a test to determine whether the left side of the heart is pumping properly.</td>
<td>100%</td>
<td>100%</td>
<td>99%</td>
</tr>
<tr>
<td>Percent of heart failure patients given ACE Inhibitor or ARB (medications) for left ventricular systolic dysfunction (LVSD) (decreased function of the left side of the heart). These medications reduce the work the heart has to perform.</td>
<td>96%</td>
<td>98%</td>
<td>97%</td>
</tr>
</tbody>
</table>

### HEART ATTACK (ACUTE MYOCARDIAL INFARCTION)
**MEASURES USED TO EVALUATE PATIENT CARE**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Bebee Average</th>
<th>Delaware Average</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of heart attack patients given percutaneous coronary intervention (PCI) within 90 minutes of arrival. PCI is a procedure to open blocked blood vessels in the heart to help prevent further heart muscle damage.</td>
<td>90%</td>
<td>94%</td>
<td>95%</td>
</tr>
<tr>
<td>Percent of heart attack patients given aspirin at discharge to reduce the risk of another attack.</td>
<td>99%</td>
<td>100%</td>
<td>99%</td>
</tr>
<tr>
<td>Percent of heart attack patients given a prescription for a statin at discharge.</td>
<td>99%</td>
<td>98%</td>
<td>98%</td>
</tr>
</tbody>
</table>

### PNEUMONIA
**MEASURES USED TO EVALUATE PATIENT CARE**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Bebee Average</th>
<th>Delaware Average</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of pneumonia patients whose initial Emergency Department blood culture was performed prior to the administration of the first hospital dose of antibiotics. A blood culture is a test to identify what type of bacteria caused the pneumonia.</td>
<td>98%</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Percent of pneumonia patients given the most appropriate initial antibiotic(s).</td>
<td>100%</td>
<td>95%</td>
<td>95%</td>
</tr>
</tbody>
</table>

### PREVENTIVE CARE
**MEASURES USED TO EVALUATE PATIENT CARE**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Bebee Average</th>
<th>Delaware Average</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of patients assessed and given influenza vaccination.</td>
<td>96%</td>
<td>93%</td>
<td>86%</td>
</tr>
<tr>
<td>Percent of patients assessed and given pneumonia vaccination.</td>
<td>98%</td>
<td>95%</td>
<td>88%</td>
</tr>
</tbody>
</table>

*Data period = October 1, 2011, to September 30, 2012; Source: U.S. Department of Health and Human Services, Hospital Compare www.hospitalcompare.hhs.gov*
## Financial Report & Community Benefit Report

### Comparative Consolidated Un-Audited Statements of
Operations for the twelve months ending June 30, 2013

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>June 2013</th>
<th>June 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Revenue</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient Revenue</td>
<td>$341,739,251</td>
<td>$312,400,906</td>
</tr>
<tr>
<td>Outpatient Revenue</td>
<td>390,259,416</td>
<td>361,497,972</td>
</tr>
<tr>
<td>Total Patient Revenue</td>
<td>$731,998,667</td>
<td>$673,898,878</td>
</tr>
<tr>
<td><strong>Revenue Deductions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We did not receive full payment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare, Medicaid, and Commercial</td>
<td>$426,283,614</td>
<td>$378,607,354</td>
</tr>
<tr>
<td>Prior Year Medicare Settlements</td>
<td>(77,153)</td>
<td>(92,240)</td>
</tr>
<tr>
<td>Charity Care and Other</td>
<td>16,892,022</td>
<td>15,008,683</td>
</tr>
<tr>
<td>Total Revenue Deductions</td>
<td>$443,098,483</td>
<td>$393,523,797</td>
</tr>
<tr>
<td>Net Patient Revenue before Bad Debt</td>
<td>$288,900,184</td>
<td>$280,375,081</td>
</tr>
<tr>
<td>Bad Debt</td>
<td>11,170,685</td>
<td>13,350,873</td>
</tr>
<tr>
<td>Net Patient Revenue after Bad Debt</td>
<td>$277,729,499</td>
<td>$267,024,208</td>
</tr>
<tr>
<td>Other Operating Revenue</td>
<td>5,326,093</td>
<td>3,814,988</td>
</tr>
<tr>
<td>Total Operating Revenue</td>
<td>$283,055,592</td>
<td>$270,839,196</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries</td>
<td>$110,479,959</td>
<td>$105,663,687</td>
</tr>
<tr>
<td>Contract Labor</td>
<td>4,167,964</td>
<td>4,568,949</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>39,464,939</td>
<td>36,795,988</td>
</tr>
<tr>
<td>Physician Fees</td>
<td>8,042,664</td>
<td>7,977,364</td>
</tr>
<tr>
<td>Patient-related Supplies and Services</td>
<td>58,594,335</td>
<td>56,002,940</td>
</tr>
<tr>
<td>Non-patient-related Supplies</td>
<td>3,581,864</td>
<td>3,648,547</td>
</tr>
<tr>
<td>Utilities</td>
<td>5,279,867</td>
<td>5,565,886</td>
</tr>
<tr>
<td>Insurance</td>
<td>2,750,238</td>
<td>2,331,896</td>
</tr>
<tr>
<td>Depreciation and Amortization</td>
<td>15,641,406</td>
<td>19,466,986</td>
</tr>
<tr>
<td>Interest</td>
<td>2,114,191</td>
<td>2,225,623</td>
</tr>
<tr>
<td>Repairs and Maintenance</td>
<td>6,897,524</td>
<td>5,780,687</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>23,430,403</td>
<td>24,065,003</td>
</tr>
<tr>
<td>Total Operating Expenses</td>
<td>$280,445,354</td>
<td>$274,093,556</td>
</tr>
<tr>
<td>Income (loss) from Operations</td>
<td>($2,610,238)</td>
<td>($3,254,360)</td>
</tr>
</tbody>
</table>

### Analysis of Service

#### Admissions
- Total: 9,151
- Inpatient: 8,761
- Outpatient: 390,259,416
- Total: 8,761

#### Average Length of Stay (Days)
- Total: 4.06
- Inpatient: 4.15

#### Cardiac Catheterization Procedures
- Total: 1,929
- Inpatient: 1,703

#### Births
- Total: 1,703
- Inpatient: 889

#### Emergency Visits (includes Millville seasonal facility)
- Total: 46,594
- Inpatient: 50,849

#### Laboratory Tests (Outpatient)
- Total: 678,612
- Inpatient: 675,939

#### Radiology Procedures (Outpatient)
- Total: 9,532
- Inpatient: 10,410

#### Radiology Procedures (Outpatient)
- Total: 107,884
- Inpatient: 108,705

#### Rehabilitation Visits (Outpatient)
- Total: 71,173
- Inpatient: 72,839

#### Surgical Procedures (Inpatient and Outpatient)
- Total: 13,131
- Inpatient: 13,483

#### Beebe Physician Network Visits
- Office Visits: 48,452
- Outpatient Visits: 47,034

#### Beebe Physician Network Hospital Inpatient Visits
- Total: 38,672

#### Home Health Visits
- Total: 13,824

### Financial Summary for Fiscal Year Ended June 30, 2013

<table>
<thead>
<tr>
<th>Community Benefit Cost</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Charity Care (at cost)</td>
<td>$40,877,142</td>
<td>$37,954,504</td>
</tr>
<tr>
<td>Bad Debt (at cost)</td>
<td></td>
<td>$3,867,035</td>
</tr>
<tr>
<td>Government-sponsored Healthcare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>(2,922,638)</td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Net Expense</td>
<td>$37,954,504</td>
<td></td>
</tr>
</tbody>
</table>

#### Community Benefit Program (net loss)
- Heart Fair: $35,000
- Health Promotion and Wellness Programs: 955,981
- School-based Wellness Programs: 152,997
- HealthierSussex.com: 4,306
- Behavioral Health Services: 169,377
- Sexual Assault Nurse Examiner Programs: 151,378
- Oncology Research Program: 173,342
- Interpreter Services: 109,749
- Physician Services Recruitment: 660,496
- Physician Practice Guarantees: 2,586,889
- Workforce Development with Educational Institutions: 283,018
- Sponsorships: 117,775
- Gull House Adult Day Care: 317,574
- Subtotal Community Benefits: 5,717,882
- Beebe Physician Network: 12,396,458
- Total Cost of Community Benefits: 18,114,340

#### Total Community Benefit for 2012: $66,389,955

#### Community Health Dollars Spent

<table>
<thead>
<tr>
<th>Category</th>
<th>Cost of Charity Care and Bad Debt</th>
<th>Community Benefit Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenses from Medicare and Medicaid Not Reimbursed</td>
<td>$37,954,504</td>
<td>$18,114,340</td>
</tr>
</tbody>
</table>

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*SPECIAL ISSUE BEACON / DECEMBER 2013*
HROs Are Resilient and Take Immediate Action

Last year, someone telephoned Beebe Healthcare and threatened to harm two physicians at the hospital. The Beebe team responded with decisive action. The police were called and an immediate lock down was imposed at the hospital, leaving only two of six entrances accessible to the public. Security checkpoints were set up that day at those two entrances, a security practice that remains in place.

Beebe leadership, knowing that random acts of violence can happen anywhere, quickly assessed what had occurred and made a security plan that would be sustained long term. More security guards were hired with the direction that all visitors must show identification and then sign in. Outside doors, other than the two main entrances, were accessible only to team members with badges. New protocols were put into place to assure a quick response in the case of any security issue.

**AS THE OLD SAYING GOES, ‘NO GOOD DEED GOES UNPUNISHED.’**

Though the immediate action was taken with the goal of protecting everyone at the hospital, it had created another safety problem. One of the locked doors was near the handicapped spaces in the parking garage. That door led directly into the hospital and bypassed the lobby where the security checkpoint had been set up. Locking the door meant that visitors would have to walk out of the garage and around the corner of the building to get to the front lobby entrance.

“In our effort to keep our patients safe, we created a new safety problem, especially for those with wheelchairs or walkers,” recalls Jeannie Briley-Wallo, RN, Director of Patient Experience.

The immediate action taken to protect those at the hospital is an example of how easy it is to create new problems when trying to solve an existing one. The solution to this problem was to create a hallway inside the hospital from the existing door to the main lobby area.

“As a team, we worked together to find an effective solution that would work,” Briley-Wallo says, adding, “one that would keep everyone safe and provide convenient access to the hospital.”

The new entrance is anticipated to be ready for use during the first quarter of 2014.
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OUR VISION
Our vision is for Sussex County to be one of the healthiest counties in the nation.

OUR MISSION
Beebe Healthcare’s charitable mission is to encourage healthy living, prevent illness, and restore optimal health with the people residing, working, or visiting the communities we serve.

The Beacon is published by Beebe Healthcare to present health information to the people of Sussex County. Health information provided in this Beacon should not be substituted for medical advice offered by a physician. Please consult your physician on medical concerns and questions.

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