Better Health Better Value Better Care



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2018 Quality Report

"Best hospital ever. They saved my daughter's life 35 years ago."

"The staff are very professional and techs, nursing staff, as well as cardiologists - very caring. Always a good experience."

«I love this hospital. They are terrific."

"My daughter had open heart surgery there when she was 2 years old in 2003 and thanks to God and Peborah Heart and Lung Center, she is going to be 19. May God continue to bless all the nurses and doctors."

thousands who have benefitted from the great care at Deborah."

"I love Peborah. They saved my life 4 years ago when I had a 10 centimeter aneurysm on the aorta which had ruptured. I'm doing great. They are truly amazing."

them taking the best possible care of my hubby. We are forever grateful."

"Every staff person I have met at Deborah is always friendly and smiling. No attitudes if they are having a bad day. I was very pleased."

"As a child, I had surgery in 1987 for my TOF repair. You gave me a second lease on life. I've been inspired so much that l decided to pursue a career in medicine. I also hope to go into cardiology."

"I had a cath and a stent put in that I needed. My doctor was so kind, I was scared and he helped me through it all. Thank you."

"Spent almost 20 years at Deborah with

"I'm just one of the countless hundreds or

Welcome

We're delighted to share with you some of Deborah Heart and Lung Center's 2018 quality highlights.

Quality means different things to different people, but we believe that almost everyone in healthcare can agree that quality should include: Better Health, Better Value, and Better Care. This triple-aim concept ensures delivery of excellent medical care, at an affordable price, that is offered with kindness, caring and compassion.

Throughout Deborah's history, this aim has been interwoven with our founding mission that "There is no price on life." For nearly 100 years we have provided life-saving cardiac, lung, and vascular care without balance-billing patients. As you can imagine, managing costs has been ingrained at Deborah for the last century. But that drive for cost containment never meant compromising on medical advancement.

Deborah's compassion is legendary, and may even surpass our reputation for medical excellence. Our bedside care and kind staff leave a lasting impression on our patients, many of whom over the years now consider themselves part of our "Deborah Family."

Better Health. Better Value. Better Care. Universal goals for all hospitals. Daily reality at Deborah.

Joseph Chirichella President & CEO Deborah Heart and Lung Center

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Overview

Better Health ... Better Value ... Better Care ...

Deborah Heart and Lung Center, a nationally recognized leader of excellent heart, lung, and vascular care, continued in 2018 to refine its delivery of high-quality, sophisticated medical care at reasonable costs, and offering its patients better health, better value, and better care.

Better Health...

Continuing a long tradition of collaboration to help improve the health of its community, Deborah recognized the need to bring additional medical services to the community, to help the medically underserved regional population have access to additional healthcare. Last year, in partnership with Landmark Healthcare Facilities of Milwaukee, a brand-new three-story medical office building opened on the hospital campus. This 60,000 sq. ft. building brought new outside medical providers to the community, including podiatry; pain management; imaging; primary care and urgent care; with the expansion of Deborah's own services, including physical therapy and cardiac rehab.

In order to maximize its community reach and focus on better health, Deborah's Community Outreach Department in 2018 offered more than 60 outreach events. Nearly 7,500 people were screened through their outreach programs, and almost 400 additional people were reached through a speaker's bureau, providing direct community impact to positively affect the health of the region.



Retter Value...

Providing quality healthcare at an affordable price is crucial to successful hospital operations. Deborah consistently demonstrates its cost-effective delivery of services, and is recognized by the federal government for its fiscal oversight.

Medicare Spending Per Beneficiary

CMS data (lower is better) Deborah spends less than the State average

	Deborah Heart	New Jersey	National
	and Lung Center	Average	Average
Medicare Spending Per Beneficiary (displayed in ratio)	1.02	1.06	0.99

Through lower spending and low readmission rates, Deborah consistently offers high-quality value to its patients. In addition to spending, CMS assigns each hospital a total performance score (higher is better) by comparing "achievement" and "improvement" scores for safety, clinical care, and patient experience. Based on currently reported information, Deborah's total performance score is as follows: Deborah - 47.4; State - 33.5; National - 38.1, ranking it well above state and national performance scores.



Medicare Performance Score

(higher is better)

Better Care...

In addition to outstanding medical care, provided at a reasonable rate, Deborah prides itself on excellent patient experience. This outstanding care touches on all aspects of a patient's stay at the hospital, from how physicians and nurses communicate with the patient, to discharge information, and from the cleanliness of the facility to the overall hospital experience. Deborah continuously ranks among the top in the state and nation for its patient satisfaction scores.

Survey of Patients' Experiences

CMS data (higher is better)

	Deborah Heart and Lung Center	New Jersey Average	National Average
Patients who reported YES, they would definitely recommend the hospital	87%	67%	72%
Patients who gave their hospital a rating of 9 or 10 on a scale from 0 (lowest) to 10 (highest)	84%	66%	73%
Patients who reported that their nurses "Always" communicated well	84%	77%	80%
Patients who reported that their doctors "Always" communicated well	83%	77%	81%
Patients who reported that they "Always" received help as soon as they wanted	70%	62%	70%
Patients who reported that staff "Always" explained about medicines before giving it to them	67%	61%	66%
Patients who reported that their room and bathroom were "Always" clean	76%	70%	75%
Patients who reported that the area around their room was "Always" quiet at night	49%	53%	62%
Patients who reported that YES, they were given information about what to do during their recovery at home	90%	85%	87%
Patients who "Strongly Agree" they understood their care when they left the hospital	63%	48%	53%

2018 Numbers



<u>ר</u>הי 4,033 INPATIENT ADMISSIONS



Δ **OPEN-HEART** 303 91 326 VASCULAR TAVR SURGICAL **PROCEDURES** PERFORMED 00 5 **ENDOVASCULAR** BARIATRICS "When another doctor said no, you said yes. That was 19 years ago. I'm nearing my 90th birthday!" - Bob L.



Cardiothoracic Surgery

Deborah Heart and Lung Center's cardiothoracic surgical program continues to see robust growth, even with the proliferation of newer, more minimally-invasive procedures for cardiac repairs without incision or cardiopulmonary bypass.

Deborah is recognized as among the best in the nation for quality and successful patient outcomes – boasting low operative mortality, complication rates, and post-surgery infection – and has earned the highest **3-Star Rating for isolated coronary artery bypass graft by the Society for Thoracic Surgeons.** This distinction is only held by less than 7% of cardiac surgical programs in North America.



Better Health...



Society for Thoracic Surgeons

Top 7% of Outcomes Nationwide

Better Value...

Rate of Readmission for Coronary Artery Bypass Graft (CABG) Surgery Patients

CMS data (lower is better)



Deborah is within the national result.

Better Care...

A drive for improved processes, use of new technologies and techniques, infection rate reductions, and new surgical options means safer heart surgery for patients. Deborah maintains low mortality rates and excellent surgical outcomes with shorter hospital stays and lower rates of post-surgical readmissions.



Deborah's vascular surgery program's reputation as a regional center of excellence draws a high volume of cases, which are increasingly performed with minimally-invasive endovascular surgical techniques, with better outcomes and shorter hospital stays. Offering a full range of surgical services, the vascular team are experts in carotid stenting, endarterectomies, aortic dissections, and aortic aneurysms of all types and locations, as well as lower extremity bypass. The team is regionally renowned as experts in limb salvage procedures.

Better Health ...

Deborah is Accredited by the Intersocietal Accreditation Commission (ICAVL) for Vascular Testing. The wide range of noninvasive tests performed each year at the Hospital on upper and lower extremities offer key identification and management of various diseases; as well as testing on the venous system and carotid artery, offering precise medical diagnoses for monitoring, management and intervention.

Deborah's vascular surgeons work closely with the team in the hospital's James Klinghoffer Center for Wound Healing and Hyperbaric Treatment, which provides advanced wound care technology and - hyperbaric oxygen therapy - pivotal in limb salvage, ulcers related to arterial insufficiency, open diabetic sores, venous insufficiency, pressure ulcers, traumatic injuries, and post-surgical wounds.

Better Value...

Ensuring continual training of highly skilled specialists in the field, Deborah maintains a highly competitive and robust fellowship program at the Hospital, including:

- Cardiovascular
- Interventional/Endovascular Cardiology
- Vascular Surgery

The vascular surgery fellowship program builds upon the core education of general surgery to provide the knowledge, skills, and abilities to develop proficiency and surgical judgment in the diagnosis and management of diseases of the arterial, venous, and lymphatic circulatory systems. Fellows are trained in both open and endovascular approaches to vascular disease, and bring highly talented resources to the vascular surgery program.



Better Care...

An integrated team and process of care ensure that patients can effectively manage their disease with medication or diet and exercise; treatment with an interventional catheterization procedure; or traditional surgery or an open – endovascular – procedure. These options offer the best opportunities for the less invasive surgery and the shortest hospital length of stay.



Vascular and Endovascular Surgery Volume Trends

Deborah volume year over year

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Heart Failure

Deborah's heart failure program is a regional leader in the treatment of advanced heart failure, and is poised to become the only left ventricular assist device (LVAD) implant site in South Jersey. Deborah's integrated team of highly trained specialists is transforming care for patients suffering from congestive heart failure. New techniques and technologies are working to extend lives, while providing these services close to home.

Better Health ...

American Heart Association - Get With The Guidelines® - Heart Failure, Gold Award

Get With The Guidelines[®]-Heart Failure is an in-hospital program for improving care by promoting consistent adherence to the latest scientific treatment guidelines. Numerous published studies demonstrate the program's success in achieving significant patient outcome improvements. Among the proven results are reductions in 30-day readmissions, a measure now used by CMS in determining CMS reimbursement rates.



Deborah is better than the national result.



2018

Better Value...

National Distribution of Hospital Results on the Mortality & Payment Measures for Heart Failure Patients

Worse mortality & lower payment	Worse mortality & average payment	Worse mortality & higher payment	
27 hospitals	86 hospitals	22 hospitals	
Average mortality & lower payment	Average mortality & average payment	Average mortality & higher payment	
377 hospitals	2396 hospitals	448 hospitals	
Better mortality & lower payment 16 hospitals	Better mortality & average payment 104 hospitals	Better mortality & higher payment	
	Working toward this goal		

CMS data (better mortality and lower payment is better)

Retter Care...

In order to be recognized with the Get With The Guidelines – Heart Failure, Gold Award, in 2018 Deborah achieved four key measurements, including: medications ordered, proper assessments conducted, and follow-up appoint-ments made.



Pulmonary

Deborah's comprehensive pulmonary medicine program combines technologies and specialist evaluations for a wide range of progressive, chronic, and acute respiratory conditions. With Bronchial Thermoplasty for treating severe asthma, Endo-Bronchial Ultrasound for accurate lung diagnosis and staging of tumors, and CT scans for early detection, Deborah's team offers a patient-centric, personalized approach to complex lung conditions. Working in tandem with its pulmonary rehab and physical therapy teams, Deborah is able to tailor personalized plans offering minimal lifestyle disruption, focused on the highest quality of life.

Better Health...

Deborah's respiratory and infection prevention control teams work hand in hand at the first sign of any conditions that could lead to infection from being on a ventilator. Because of this, Deborah's ventilator associated conditions (VAC) and ventilator associated events (VAE) consistently remain below national levels, and Deborah's standard infection ratio score consistently remains below 1.0.

VAC reported to National Healthcare Safety Network

	National Expected VAC	Deborah's SIR Score
First half 2017	1.39	0
Second half 2017	1.19	0
First half 2018	1.12	0.89
Second half 2018	1.02	0

(lower is better/Standard Infection Ratio (SIR) below one is optimal)

VAE reported to National Healthcare Safety Network

(lower is better/Standard Infection Ratio (SIR) below one is optimal)

	National Expected VAE	Deborah's SIR Score
First half 2017	3.74	0.27
Second half 2017	3.25	0
First half 2018	3.15	0.64
Second half 2018	2.77	0.36

Retter Value...

Rate of Readmission for Chronic Obstructive Pulmonary Disease (COPD) Patients

CMS data (lower is better)



Deborah is better than the national result.

Rate of Readmission for Pneumonia Patients CMS data (lower is better)



Deborah is better than the national result.

Better Care...

Deborah employees' high influenza vaccination rate ensures that patients are protected from being exposed to the flu when they visit for a clinic appointment or a procedure. It is especially important to reduce risk of flu exposure post-surgically when an infection can seriously compromise recovery.



Healthcare Workers Given Influenza Vaccination

Electrophysiology

The electrophysiology team continues to meet the regional demand for the latest technologies and treatments in pacemakers, ICDs/defibrillators, and lead extraction. The Department's ablation volumes continue to grow at a robust pace, as well as handling increasingly complex arrhythmia problems including epicardial ablations and ventricular tachycardias. Other routine innovations in use are multi-point pacing, the Micra®Transcatheter Pacing System, and the CardioMEMS[™] device for remote sensor monitoring.

Better Health ...

Deborah's wide range of technologies to treat heart arrhythmias ensures that each patient receives care for their specific, unique medical condition. Whether medication and lifestyle management, a device implant, or an ablation, Deborah's skilled specialists provide the targeted treatment for optimal outcomes.



Defibrillator, Pacemaker and Ablation Volume Trends

Electrophysiology



Deborah's use of the Stereotaxis Remote Magnetic Navigation System has built a major program of robotic ablation excellence in South Jersey for patients with heart arrhythmias. Use of the system's remote mapping and robotic radiofrequency energy ensures excellent long-term outcomes, usually with a decreased length of stay and a quicker recovery. This is making ablation procedures the preferred method for controlling complex arrhythmias.

Better Care....

Thousands of patients have received implants over the years, and as these implants age, lead extractions and re-positioning are often vitally important medical procedures. These are specialty skills that not every hospital has experience with. Deborah has years of expertise with lead procedures and the top-notch Cook Medical lead extraction system, which provides a critically needed regional service.



Lead Procedures

Cardiac Catheterization

Deborah's cardiac catheterization labs have high regional volume, with patient growth at 3.6% in 2018. Both diagnostic and interventional cases – including coronary procedures, peripheral vascular, structural heart diagnostic and procedures – are performed with the latest technologies and techniques. This wide range of treatment options – tailored to each patient's specific needs and anatomy – offers superior patient outcomes in even the most challenging cases.

Better Health ...

Nearly all types of endovascular and cardiac procedures – whether interventional or diagnostic, including STEMI (ST-Elevation Myocardial Infarction, a very serious type of heart attack), are done through the wrist, or transradial approach at Deborah. Advantages for transradial caths:



Reduces serious bleeding complications



Reduces possible stent thrombosis



Better Value...

More than 3,000 catheterizations are performed annually at Deborah Heart and Lung Center; 60% of these procedures are transradial.

Deborah Transradial Procedure Percentage



Better Care...

In addition to strong volume for both interventional and diagnostic caths, the Deborah team continues to innovate with new technology and techniques such as the Railway/Sheathless Catheter System, which allows for the use of larger catheters in transradial procedures, sometimes needed for specific conditions, and Cobra/Synergy Stents that offer new options for patients with bleeding risks.



Cardiac Catheterization Volume Trends

Transcatheter Aortic Valve Replacement (TAVR)

Since 2014 Deborah's surgeons have expanded care options for managing advanced and complex valvular and structural heart disease. Volumes for TAVR, performed in the Hospital's hybrid OR, have increased each year of the program.

Better Health ...

Specialists have broadened the use of TAVR from high-risk to intermediate-risk patients, offering more treatment options with minimally-invasive catheter-based procedures. Additionally, Deborah's willingness to care for patients many who are sicker, older, and present with numerous co-morbidities – presents an insight into the strength of Deborah's program, whose team is willing to tackle the most complex cases, providing a lifeline of hope.

Retter Value...

Having an aortic valve replaced percutaneously, rather than through open-heart surgery, offers significant benefit to patients, including a shorter length of stay in the hospital, quicker recovery time, less blood loss during surgery, and less risk of infection.

Better Care...



TAVR vs Isolated AVR Volume Trends

"Love this hospital!! Saved my son's life in 1983. Forever grateful!" "This month will be 13 years since my surgery. I just wanted to send a note to personally thank each and every one of you. Thank you."

"I remember all of you and the excellent care You have provided me over many years at Veborah. Thank you for your help."

[«]I was in heart failure in 2005 and I was in Peborah. I thank God for this great hospital! I still follow-up through the clinic there and love my cardiologist."

"Thank you for all you are doing for me. I owe my life to you."

"I had my quad CABG in June of 2015. Thank you from the bottom of my heart."

"Deborah has the most caring (and qualified) doctors, AND some of the BEST nurses ever."

You saved my husband's life last year! Forever grateful for these special doctors and entire team.

"Your doctors have always been top shelf. They explain everything and when prescriptions are needed, the office responds in a timely fashion. I look forward to seeing you each year."

"Deborah Hospital is the Best Heart Hospital located in NJ." "I love Deborah. Best care, best doctors."

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