

# THE SOURCE

ENHANCING PROVIDER PERFORMANCE & CLINICAL INTEGRATION

Q4 2019 | V 14 NO. 4 | HEALTHTRUST

## THE HEART OF THE MATTER

HealthTrust members achieve Cardiac Center of Excellence accreditation

## GOING GREEN WITH GRASSROOTS EFFORTS

How small changes have the power to make a big impact

## THE POWER OF COLLABORATION

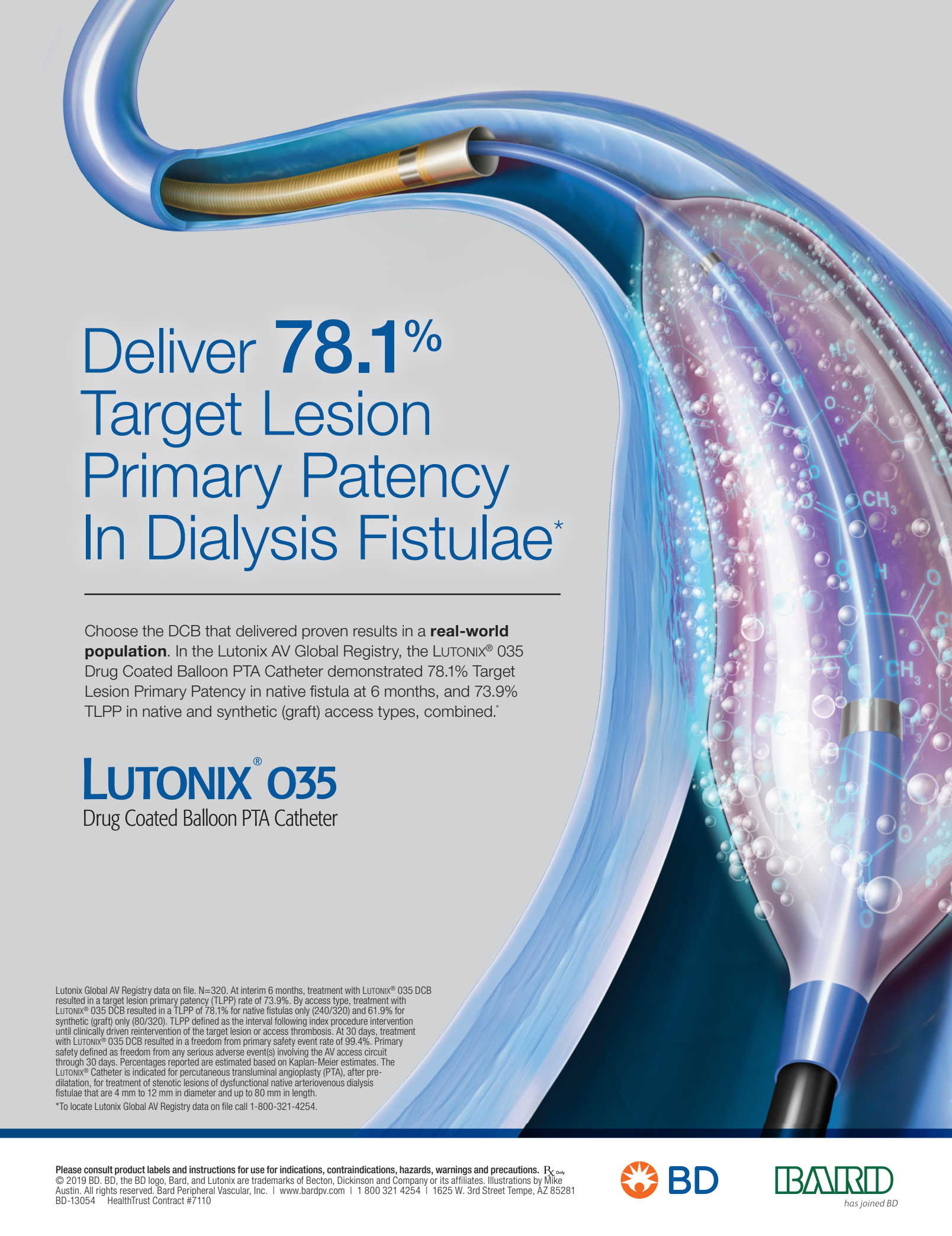
Clinical integration brings CQO to the next level



## TRANSFORMING CARE

2019 HealthTrust Innovation Grant recipients Boston Medical Center & Centura Health demonstrate the ripple effects of innovation





# Deliver **78.1%** Target Lesion Primary Patency In Dialysis Fistulae\*

Choose the DCB that delivered proven results in a **real-world population**. In the Lutonix AV Global Registry, the LUTONIX® 035 Drug Coated Balloon PTA Catheter demonstrated 78.1% Target Lesion Primary Patency in native fistula at 6 months, and 73.9% TLPP in native and synthetic (graft) access types, combined.\*

## LUTONIX® 035

Drug Coated Balloon PTA Catheter

Lutonix Global AV Registry data on file. N=320. At interim 6 months, treatment with LUTONIX® 035 DCB resulted in a target lesion primary patency (TLPP) rate of 73.9%. By access type, treatment with LUTONIX® 035 DCB resulted in a TLPP of 78.1% for native fistulas only (240/320) and 61.9% for synthetic (graft) only (80/320). TLPP defined as the interval following index procedure intervention until clinically driven reintervention of the target lesion or access thrombosis. At 30 days, treatment with LUTONIX® 035 DCB resulted in a freedom from primary safety event rate of 99.4%. Primary safety defined as freedom from any serious adverse event(s) involving the AV access circuit through 30 days. Percentages reported are estimated based on Kaplan-Meier estimates. The LUTONIX® Catheter is indicated for percutaneous transluminal angioplasty (PTA), after pre-dilatation, for treatment of stenotic lesions of dysfunctional native arteriovenous dialysis fistulae that are 4 mm to 12 mm in diameter and up to 80 mm in length.

\*To locate Lutonix Global AV Registry data on file call 1-800-321-4254.



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### TRANSFORMING CARE

2019 HealthTrust Innovation Grant recipients Boston Medical Center and Centura Health demonstrate the ripple effects of innovation.

### EDITORIAL CONTRIBUTIONS:

Clinicians and staff within HealthTrust member facilities are invited to share their expertise as part of upcoming stories. Readers are also invited to suggest other experts for interviews or article ideas for publication consideration. Preference is given to topics that represent:

- \* Clinical or supply chain initiatives that exemplify industry best practices
- \* Physician Advisor expertise
- \* Innovation, new technology, insights from data and analytics
- \* Positive impacts to cost, quality, outcomes and/or the patient experience

Contact Faye Porter at [faye.porter@healthtrustpg.com](mailto:faye.porter@healthtrustpg.com) with suggestions. (Note: HealthTrust reserves the right to edit all articles and information accepted for publication.)

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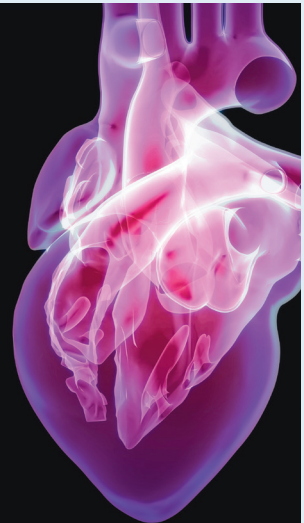
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### THE HEART OF THE MATTER

Members exemplify clinical excellence with Cardiac Center of Excellence Accreditation.



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### GOING GREEN WITH GRASSROOTS EFFORTS

HealthTrust members show how simple operational changes can positively impact the environment.

HealthTrust (Healthtrust Purchasing Group, L.P.) is committed to strengthening provider performance and clinical excellence through an aligned membership model and the delivery of total spend management advisory solutions that leverage our operator experience, scale and innovation. Headquartered in Nashville, Tennessee, HealthTrust ([healthtrustpg.com](http://healthtrustpg.com)) serves over 1,600 hospitals and health systems, and more than 40,000 other member locations including ambulatory surgery centers, physician practices, long-term care and alternate care sites. Follow us on Twitter [@healthtrustpg](https://twitter.com/healthtrustpg).

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# Collaborative imaging **Made possible.**

*Made For life*



Working together to understand your needs and challenges drives valuable outcomes that positively impact you and your patients' future.

Canon Medical's vision and commitment to improving life for all, lies at the heart of everything we do. By partnering to focus on what matters, together we can deliver intelligent, high quality solutions.

With Canon Medical, true innovation is **made possible.**

***HealthTrust***

**Contract Number  
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## CEO perspective

# Platinum reflections

**For two decades, HealthTrust has been at the forefront of supporting how quality healthcare is defined and delivered.** Our committed model has stood the test of time and been an industry differentiator in modeling supply chain excellence and innovation.

The milestones that have shaped HealthTrust over the last 20 years were presented through a visually compelling timeline during the HealthTrust University Conference in mid-August. Before we begin to write the chapter for our next decade, I'd like to share a few highlights of the history that has brought us here.

## THEN & NOW

"To obtain the best price for clinically recommended products, ensure their timely delivery, and continuously evaluate and improve our services," was the mission of a newly formed HealthTrust in 1999.

Known in the industry as "HPG," HealthTrust Purchasing Group was born to preserve price value for HCA and two local hospital companies that emerged, LifePoint and Triad.

The first office opened in Brentwood, Tennessee, and at that time, HealthTrust managed \$3 billion in committed spend. Today, our corporate office is located in the heart of downtown Nashville's Capitol View (better known to locals as the "north Gulch"). We now manage \$42 billion in total aligned spend, committed at a national level, which provides an unparalleled portfolio value to members across the continuum of care.

Since our inception, the simplicity of the HealthTrust model—aligned decision-making, a one-price-for-all philosophy, and fixed pricing for the duration of a contract—has served as our foundation.

## FROM PURCHASING TO PERFORMANCE FOCUS

A number of years ago, the marketing team and I made it our mission to drop the use of "HPG" as our name when HealthTrust expanded its capabilities outside of group purchasing. However, considering how the business has evolved, HPG best describes us today as HealthTrust **Performance** Group. Our mission statement has been refined over the years to highlight our commitment to supporting providers

in their clinical, operational and financial performance improvement initiatives.

## ABOUT THIS ISSUE

I join **John Young, M.D.**, our CMO and Executive Publisher of *The Source*, in his excitement surrounding our new content partner and vision for this magazine over the next few years. John shares more about the redesign in his column on page 6.

Also hear John's perspective as a physician on industry progress toward a clinically integrated supply chain, beginning on page 20. You are likely aware of the Cost, Quality & Outcomes (CQO) movement. It was started in 2013 by a materials management association, AHRMM. As healthcare transitioned from fee-for-service to value-based care, the movement validated the role of the three critical components that comprise the "triple aim" of healthcare—cost control, a focus on quality and improving outcomes.

More than ever before in the history of supply chain, CQO shines a light on the important role materials managers play as catalysts in healthcare reform. Their ability to understand the intersection of the triple aim and the use of evidence-based research provides the opportunity to transform purchasing discussions with physicians and clinicians in hospitals across the country.

Your trust in us has helped to solidify HealthTrust as the leading performance improvement company for healthcare. Thank you for being part of a remarkable journey. My team and I look forward to serving you for the next 20 years and, together, working to positively impact the delivery of care for generations to come. **HT**



**Ed Jones**

President/CEO, HealthTrust  
Publisher, *The Source* magazine

Jason Mallory





# A Solution That Delivers



Tru-D's patented Sensor360® technology calculates a measured, accurate UVC dose that destroys pathogens throughout a room from **one** position and **one** cycle.<sup>(1,2)</sup>

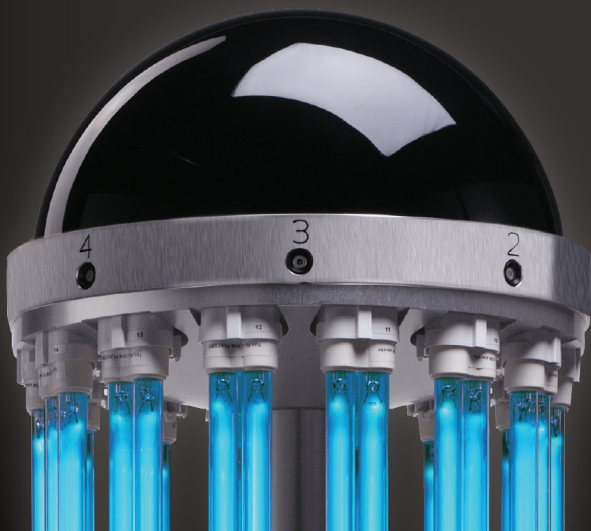


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1. Anderson, D., et al (2013). Decontamination of Targeted Pathogens from Patient Rooms Using an Automated Ultraviolet-C-Emitting Device. *Infection Control and Hospital Epidemiology*, 34(5), 466-471.  
2. Mahida, N., et al (2013). First UK evaluation of an automated Ultraviolet-C room decontamination device (Tru-D). *Journal of Hospital Infection*, 05(005), 1-4.  
3. Sexton, D., Anderson, D., et al (2017). Enhanced terminal room disinfection and acquisition and infection caused by multidrug-resistant organisms and *Clostridium difficile* (the Benefits of Enhanced Terminal Room Disinfection study): a cluster-randomised, multicentre, crossover study. *The Lancet*. 389(10071), 805-814

HealthTrust contract #6629

## CMO perspective

# Marking history of a different kind

As the organization winds down a yearlong commemoration of its 20-year anniversary, my team thought it would be interesting to offer a little history on *The Source* magazine. This edition marks the publication of our 38th issue since the magazine was re-envisioned as a member-focused publication in Q3 of 2010. Throughout the 2,700+ pages published since that time, we have aimed to highlight member success stories, Physician Advisor insights, and best practices from both industry and internal subject matter experts.

## IN THE BEGINNING...

*The Source* began in 2006 as a publication of a faith-based GPO, Consorta. When Consorta became part of HealthTrust in 2007, the magazine became a collaborative effort between the two organizations. In September of 2007, the name on the cover was changed to HealthTrust with a tagline that read: Supply Chain Strategies for Success.

In 2015, HealthTrust hired my predecessor as its first Chief Medical Officer who, in addition to his role as CMO, became Executive Publisher and Editor-at-large of the magazine. When I came on board in 2018, I also assumed those responsibilities and asked the team to embark on an RFP process to review content providers to carry out our vision moving forward. After a nationwide search with eight initial publishers, four were invited to Nashville to formally present.

We are excited to have selected a new content partner—GLC—a Skokie, Illinois-based communications and marketing agency. GLC will manage an organization-wide thought leadership strategy that includes our print magazine and digital assets as well as ad sales for *The Source*.

While the magazine's name remains the same, our new tagline better reflects the evolution of the industry and the HealthTrust business: Enhancing Provider Performance & Clinical Integration. This edition is our first with both an updated look and a new approach to content.



## SHARE YOUR INSIGHTS

Members are encouraged to take five minutes and share your feedback by responding to the Q4 reader survey you will receive via email in December. And, as always, I invite you to share your stories with us at [thesource@healthtrustpg.com](mailto:thesource@healthtrustpg.com).

## INNOVATION<sup>2</sup>

I was honored to recognize both Boston Medical Center (BMC) and Centura Health with Innovation Grants during the HealthTrust University Conference in August.

The applications submitted by these teams detailed impressive programs for advancing healthcare performance. To further enhance their initiatives, each team will receive \$50,000—half as cash and the remainder in service line consulting support from HealthTrust.

## Patient safety focus

BMC piloted a vascular surgery High-performance Operating Room Team (HPT) to reduce the likelihood of surgical errors and postoperative complications. Based on data indicating that vascular surgery patients experienced higher rates of surgical site infections (compared to other surgical specialties), BMC decided to start there. With the help of the

*Continued on page 8*





# Reduce complications and improve patient outcomes.<sup>1</sup>

## 3M™ Bair Hugger™ Temperature Management System

When it comes to temperature management, degrees matter before, during and after surgery. Even a small drop in core body temperature can result in inadvertent perioperative hypothermia, a surgical complication associated with an increased risk of surgical site infections (SSIs) and other costly, potentially deadly consequences.

The 3M™ Bair Hugger™ temperature management system uses proven, effective solutions and helps clinicians to maintain normothermia before, during and after surgery and across the continuum of care.<sup>2,3,4</sup> Bair Hugger temperature management solutions can help clinicians advance quality of care, improve product utilization, streamline workflow, and strengthen patient satisfaction.

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HealthTrust contract #735

1. LAB-SUPPORT-05-297733  
2. Kurz A, Sessler DI, Lenhardt R. Perioperative normothermia to reduce the incidence of surgical-wound infection and shorten hospitalization. *N Engl J Med* 1996; 334: 1209–1215.  
3. Melling AC, Ali B, Scott EM, Leaper DJ. Effects of preoperative warming on the incidence of wound infection after clean surgery: a randomised controlled trial. *Lancet* 2001; 358: 876–880.  
4. Butwick, A.J., et al., The effect of forced air-warming to reduce hypothermia and shivering for patients undergoing Cesarean delivery. *Anesthesiology*. 2005. p. A593.  
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Continued from page 6

HealthTrust Innovation Grant, three additional HPTs will be formed over the next year, with the first incorporating vascular with cardiac, thoracic and transplant surgeries. Read more about the benefits BMC has already seen from the vascular surgery pilot on page 32.

### Virtual efficiency

Centura Health launched a digital care center so patients visiting its specialty clinics could video conference with a pharmacist. With its Innovation Grant, Centura plans to create a pharmacy referral process to the digital care center within the EHR, enabling physicians to refer patients they feel might benefit from virtual pharmacy visits while also reducing office staff workload. Some of the areas where HealthTrust consultants will offer expertise include technology, lean processes and data mining. Learn more about the continuous increase in volume Centura has experienced since implementing the digital care center, beginning on page 38.

### WHAT WOULD YOU DO WITH \$50K?

The Innovation Grant site for 2020 will open for applications in the spring. Now is the time to start formulating your plans for a submission. What innovative care delivery or performance initiatives are you working on that could use a little help to move to the next level? Reach out to my team anytime with questions at [innovation@healthtrustpg.com](mailto:innovation@healthtrustpg.com). **HT**



Jason Mallory

A stylized, handwritten signature of the name "John" in black ink.

**John Young, M.D., MBA, CPE, FACHE**  
Chief Medical Officer, HealthTrust  
Executive Publisher & Editor-at-large, *The Source* magazine

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UNIVERSITY CONFERENCE

**2020**  
**CALL FOR PROPOSALS**

**NOV. 11 – DEC. 16, 2019**



Members and industry subject matter experts are invited to share impactful clinical initiatives or supply chain success stories with HealthTrust members during the annual HealthTrust University Conference event.

Proposals for sessions to be considered for presentation at HTU 2020 are being accepted online through Dec. 16, 2019.

Using Google Chrome as your browser, visit [conferenceabstracts.com/healthtrust2020.htm](https://conferenceabstracts.com/healthtrust2020.htm) to submit your program idea for review. (No submissions will be accepted after Dec. 16.)

Questions? Email [university@healthtrustpg.com](mailto:university@healthtrustpg.com)

**2020 HealthTrust University Conference | Aug. 3 – 5 | McCormick Place | Chicago | Illinois**



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**2 doses** – in – **1 month**

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**BRIEF SUMMARY OF PRESCRIBING INFORMATION** - These highlights do not include all the information needed to prescribe HEPLISAV-B safely and effectively. Please see Full Prescribing Information for HEPLISAV-B. The FDA-approved product labeling can be found at [www.HeplisavB.com](http://www.HeplisavB.com) or 1-84-HEPLISAV (1-844-375-4728).

#### INDICATIONS AND USAGE

HEPLISAV-B is indicated for prevention of infection caused by all known subtypes of hepatitis B virus. HEPLISAV-B is approved for use in adults 18 years of age and older.

#### CONTRAINDICATIONS

Do not administer HEPLISAV-B to individuals with a history of severe allergic reaction (e.g. anaphylaxis) after a previous dose of any hepatitis B vaccine or to any component of HEPLISAV-B, including yeast.

#### WARNINGS AND PRECAUTIONS

##### Managing Allergic Reactions

Appropriate medical treatment and supervision must be available to manage possible anaphylactic reactions following administration of HEPLISAV-B.

##### Immunocompromised Individuals

Immunocompromised persons, including individuals receiving immunosuppressant therapy, may have a diminished immune response to HEPLISAV-B.

##### Limitations of Vaccine Effectiveness

Hepatitis B has a long incubation period. HEPLISAV-B may not prevent hepatitis B infection in individuals who have an unrecognized hepatitis B infection at the time of vaccine administration.

#### ADVERSE REACTIONS

##### Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a vaccine cannot be directly compared to rates in the clinical trials of another vaccine and may not reflect the rates observed in practice.

A total of 9597 individuals 18 through 70 years of age received at least 1 dose of HEPLISAV-B in 5 clinical trials conducted in the United States, Canada, and Germany. Data from three of these trials are provided below.

##### Study 1 in Subjects 18 through 55 Years of Age

Study 1 was a randomized, observer-blind, active-controlled, multicenter study in Canada and Germany in which 1810 subjects received at least 1 dose of HEPLISAV-B and 605 subjects received at least 1 dose of Engerix-B® [Hepatitis B Vaccine (Recombinant)]. Enrolled subjects had no history of hepatitis B vaccination or infection. HEPLISAV-B was given as a 2-dose regimen at 0 and 1 month followed by saline placebo at 6 months. Engerix-B was given at 0, 1, and 6 months. In the total study population, the mean age was 40 years; 46% of the subjects were men; 93% were white, 2% black, 3% Asian and 3% Hispanic; 26% were obese, 10% had hypertension, 8% had dyslipidemia, and 2% had diabetes mellitus. These demographic and baseline characteristics were similar in both vaccine groups.

##### Solicited Local and Systemic Adverse Reactions

Subjects were monitored for local and systemic adverse reactions using diary cards for a 7-day period starting on the day of vaccination. The percentages of subjects who reported local and systemic reactions are shown in Table 1.

Table 1  
Study 1: Percent of Subjects Who Reported Local or Systemic Reactions Within 7 Days of Vaccination

Reaction	HEPLISAV-B %		Engerix-B %		
	Post-Dose*		Post-Dose*		
	1	2	1	2	3
Local	N=1810	N=1798	N=605	N=603	N=598
Injection Site Pain	38.5	34.8	33.6	24.7	20.2
Injection Site Redness†	4.1	2.9	0.5	1.0	0.7
Injection Site Swelling†	2.3	1.5	0.7	0.5	0.5
Systemic					
Fatigue	17.4	13.8	16.7	11.9	10.0
Headache	16.9	12.8	19.2	12.3	9.5
Malaise	9.2	7.6	8.9	6.5	6.4
	N=1784	N=1764	N=596	N=590	N=561
Fever‡	1.1	1.5	1.8	1.7	1.8

Note: only subjects having data are included. Clinical trial number: NCT00435812

\*HEPLISAV-B was given as a 2-dose regimen at 0 and 1 month followed by saline placebo at 6 months.

Engerix-B was given at 0, 1, and 6 months

† Redness and swelling ≥ 2.5 cm.

‡ Oral temperature ≥ 100.4°F (38.0°C).

##### Unsolicited Adverse Events:

Unsolicited adverse events within 28 days following any injection, including placebo, were reported by 42.0% of HEPLISAV-B recipients and 41.3% of Engerix-B recipients.

##### Serious Adverse Events (SAEs)

Subjects were monitored for serious adverse events for 7 months after the first dose of vaccine. The percentage of subjects reporting serious adverse events was 1.5% in the HEPLISAV-B group and 2.1% in the Engerix-B group. No acute myocardial infarctions were reported. No deaths were reported.

##### Potentially Immune-mediated Adverse Events

Potentially immune-mediated adverse events that occurred within 7 months of the first dose of vaccine were reported in 0.2% (n = 4) of HEPLISAV-B recipients and 0.7% (n = 4) of Engerix-B recipients. The following events were reported in the HEPLISAV-B group in one subject each: granulomatosis with polyangiitis, lichen planus, Guillain-Barré syndrome, and Grave's disease. The following events were reported in the Engerix-B group in one subject each: Bell's palsy, Raynaud's phenomenon, and Grave's disease. One additional Engerix-B recipient with a history of mixed connective tissue disease had p-ANCA-positive vasculitis.

##### Study 2 in Subjects 40 through 70 Years of Age

Study 2 was a randomized, observer-blind, active-controlled, multicenter study in Canada and the United States in which 1968 subjects received at least 1 dose of HEPLISAV-B and 481 subjects received at least 1 dose of Engerix-B. HEPLISAV-B was given as a 2-dose regimen at 0 and 1 month followed by saline placebo at 6 months. Enrolled subjects had no history of hepatitis B vaccination or infection. Engerix-B was given at 0, 1, and 6 months. In the total population, the mean age was 54 years; 48% of subjects were men; 82% were white, 15% black, 1% Asian and 6% Hispanic; 44% were obese, 30% had hypertension, 30% had dyslipidemia, and 8% had diabetes mellitus. These demographic and baseline characteristics were similar in both vaccine groups.

**HEPLISAV-B®**  
Hepatitis B Vaccine (Recombinant), Adjuvanted

### Solicited Local and Systemic Adverse Reactions

Subjects were monitored for local and systemic adverse reactions using diary cards for a 7-day period starting on the day of vaccination. The percentages of subjects who experienced local and systemic reactions are shown in Table 2.

Table 2 Study 2: Percent of Subjects Who Reported Local or Systemic Reactions Within 7 Days of Vaccination					
Reaction	HEPLISAV-B %		Engerix-B %		
	Post-Dose*		Post-Dose*		
	1	2	1	2	3
Local	N=1952	N=1905	N=477	N=464	N=448
Injection Site Pain	23.7	22.8	18.4	15.9	13.8
Injection Site Redness†	0.9	0.7	0.6	0.2	0.2
Injection Site Swelling†	0.9	0.6	0.6	0.6	0.2
Systemic					
Fatigue	12.6	10.8	12.8	12.1	9.4
Headache	11.8	8.1	11.9	9.5	8.5
Malaise	7.7	7.0	8.6	7.1	5.1
Myalgia	8.5	6.4	9.6	8.0	4.5
	N=1923	N=1887	N=472	N=459	N=438
Fever‡	0.6	0.6	0.6	0.9	0.7

Note: only subjects having data are included. Clinical Trial Number: NCT01005407

\*HEPLISAV-B was given as a 2-dose regimen at 0 and 1 month followed by saline placebo at 6 months.

Engerix-B was given at 0, 1, and 6 months

† Redness and swelling  $\geq 2.5$  cm

‡ Oral temperature  $\geq 100.4^{\circ}\text{F}$  ( $38.0^{\circ}\text{C}$ ).

### Unsolicited Adverse Events:

Unsolicited adverse events within 28 days following any injection, including placebo, were reported by 35.4% of HEPLISAV-B recipients and 36.2% of Engerix-B recipients.

### Serious Adverse Events

Subjects were monitored for serious adverse events for 12 months after the first dose of vaccine. The percentage of subjects reporting serious adverse events was 3.9% in the HEPLISAV-B group and 4.8% in the Engerix-B group. Acute myocardial infarction occurred in 0.1% (n=2) of HEPLISAV-B recipients and 0.2% (n=1) of Engerix-B recipients.

### Autoimmune Adverse Events

Subjects were monitored for the occurrence of new-onset potentially immune-mediated adverse events for 12 months after the first dose of vaccine. Events were adjudicated as to whether they were autoimmune by an external group of experts blinded to treatment assignment. As determined by the adjudicators, new-onset autoimmune adverse events were reported in 0.2% (n=3) of HEPLISAV-B recipients: two subjects with hypothyroidism and one subject with vitiligo. None of these events was considered related to vaccination by the expert group. No new-onset autoimmune adverse events were reported in the Engerix-B group. Although not referred to the external group of experts, one HEPLISAV-B recipient was determined to have Tolosa-Hunt syndrome which is presumed to have an immune-mediated etiology. This event was not considered related to vaccination.

### Deaths

One subject (0.05%) died of a pulmonary embolism in the HEPLISAV-B group and 1 subject (0.2%) died of heart failure in the Engerix-B group. Neither death was considered related to vaccination.

### Study 3 in Subjects 18 through 70 Years of Age

Study 3 was a randomized, observer-blind, active-controlled, multicenter study in the United States in which 5587 subjects received at least 1 dose of HEPLISAV-B and 2781 subjects received at least 1 dose of Engerix-B. Enrolled subjects had no history of hepatitis B vaccination or infection. HEPLISAV-B was given as a 2-dose regimen at 0 and 1 month followed by saline placebo at 6 months. Engerix-B was given at 0, 1, and 6 months. In the total study population, the mean age was 50 years; 51% were men; 71% were white, 26% black, 1% Asian, and 9% Hispanic; 48% were obese, 36% had hypertension, 32% had dyslipidemia, and 14% had type 2 diabetes mellitus. These demographic and baseline characteristics were similar in both vaccine groups.

### Unsolicited Medically-Attended Adverse Events

Subjects were monitored for unsolicited medically-attended adverse events, those for which a subject sought medical care, for 13 months after the first dose of vaccine. Overall, medically-attended adverse events were reported in 46.0% of HEPLISAV-B recipients and 46.2% of Engerix-B recipients. Herpes zoster was reported in 0.7% of HEPLISAV-B recipients and 0.3% of Engerix-B recipients. Unsolicited medically-attended adverse events within 28 days following any injection, including placebo, were reported by 20.1% of both HEPLISAV-B and Engerix-B recipients.

### Serious Adverse Events

Subjects were monitored for serious adverse events for 13 months after the first dose of vaccine. The percentage of subjects who reported serious adverse events was 6.2% in the HEPLISAV-B group and 5.3% in the Engerix-B group. Acute myocardial infarction (AMI) was reported in 0.25% (n=14) of HEPLISAV-B recipients and 0.04% (n=1) of Engerix-B recipients. An analysis of serious adverse events likely representing myocardial infarction (MI) was conducted using the standard Medical Dictionary for Regulatory Activities (MedDRA) query (SMQ) for MI. This analysis identified a total of 19 HEPLISAV-B subjects (0.3%) and 3 Engerix-B subjects (0.1%) with events included in the SMQ for MI (these events include the 15 reports of AMI). Additional evidence, including information on temporal relationship and baseline risk factors, does not support a causal relationship between HEPLISAV-B administration and AMI. Among the 19 events identified as MI in HEPLISAV-B recipients, three occurred within 14 days, nine occurred within 53-180 days, and seven occurred more than 180 days following any dose of HEPLISAV-B. Among the three events identified as MI in Engerix-B recipients, one each occurred 13, 115, and 203 days following any dose. All 19 HEPLISAV-B recipients and 3 Engerix-B recipients reported one or more baseline risk factors for cardiovascular disease.

### Autoimmune Adverse Events

Subjects were monitored for the occurrence of new-onset potentially immune-mediated adverse events for 13 months after the first dose of vaccine. Events were adjudicated as to whether they were autoimmune by an external group of experts who were blinded to treatment assignment. As determined by the adjudicators, new-onset autoimmune adverse events were reported in 0.1% (n=4) of HEPLISAV-B recipients (one each of: alopecia areata, polymyalgia rheumatica, ulcerative colitis, and autoimmune thyroiditis [with concurrent diagnosis of papillary thyroid carcinoma]). None of these events was considered to be related to vaccination by the external experts. No new-onset autoimmune adverse events were reported in the Engerix-B group.

### Deaths

During the study death was reported in 25 subjects (0.4%) in the HEPLISAV-B group and 7 subjects (0.3%) in the Engerix-B group. No death was considered related to vaccination.

### DRUG INTERACTIONS

#### Use with Immune Globulin

There are no data to assess the concomitant use of HEPLISAV-B with immune globulin. When concomitant administration of HEPLISAV-B and immune globulin is required, they should be given with different syringes at different injection sites.

#### Interference with Laboratory Tests

Hepatitis B surface antigen (HBsAg) derived from hepatitis B vaccines has been transiently detected in blood samples following vaccination. Serum HBsAg detection may not have diagnostic value within 28 days after receipt of HEPLISAV-B.

### USE IN SPECIFIC POPULATIONS

#### Pregnancy

##### Pregnancy Exposure Registry

There is a pregnancy exposure registry that monitors pregnancy outcomes in women exposed to HEPLISAV-B during pregnancy. Women who receive HEPLISAV-B during pregnancy are encouraged to contact 1-844-443-7734.

#### Risk Summary

All pregnancies have a risk of birth defect, loss, or other adverse outcomes. In clinically recognized pregnancies in the US general population, the estimated background risk of major birth defects is 2% to 4% and of miscarriage is 15% to 20%.

There are no clinical studies of HEPLISAV-B in pregnant women. Available human data on HEPLISAV-B administered to pregnant women are insufficient to inform vaccine-associated risks in pregnancy.

In a developmental toxicity study, 0.3 mL of a vaccine formulation containing 2.5 mcg HBsAg and 3000 mcg cytosine phosphoguanine (CpG) 1018 adjuvant was administered to female rats prior to mating and during gestation. These animal studies revealed no evidence of harm to the fetus due to this vaccine formulation [see Data]

#### Data

##### Animal data

Developmental toxicity studies were conducted in female rats. Animals were administered 0.3 mL of a vaccine formulation containing 2.5 mcg HBsAg and 3000 mcg CpG 1018 adjuvant twice prior to mating, and on gestation days 6 and 18 (a single human dose of HEPLISAV-B contains 20 mcg HBsAg and 3000 mcg CpG 1018 adjuvant). No adverse effects on pre-natal and post-natal development up to the time of weaning were observed. There were no vaccine-related fetal malformations or variations observed.

#### Lactation

##### Risk Summary

It is not known whether HEPLISAV-B is excreted in human milk. Data are not available to assess the effects of HEPLISAV-B on the breastfed infant or on milk production/excretion.

The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for HEPLISAV-B and any potential adverse effects on the breastfed child from HEPLISAV-B or from the underlying maternal condition. For preventive vaccines, the underlying condition is susceptibility to disease prevented by the vaccine.

#### Pediatric Use

Safety and effectiveness of HEPLISAV-B have not been established in individuals less than 18 years of age.

#### Geriatric Use

Clinical trials included 909 adults 65 through 70 years of age who received HEPLISAV-B.

Among subjects who received HEPLISAV-B, a seroprotective level of antibody to HBsAg was achieved in 90% of those 65 through 70 years of age compared to 96% of those aged 18 through 64 years of age.

Safety and effectiveness of HEPLISAV-B in adults older than 70 years of age were extrapolated from findings in subjects younger than 70 years of age.

#### Adults on Hemodialysis

Safety and effectiveness of HEPLISAV-B have not been established in adults on hemodialysis.

### PATIENT COUNSELING INFORMATION

- Inform vaccine recipient of the potential benefits and risks associated with vaccination, as well as the importance of completing the immunization series.
- Emphasize that HEPLISAV-B contains non-infectious purified HBsAg and cannot cause hepatitis B infection.
- Advise vaccine recipient to report any adverse events to their healthcare provider or to the Vaccine Adverse Event Reporting System (VAERS) at 1-800-822-7967 and [www.vaers.hhs.gov](http://www.vaers.hhs.gov).
- Provide the Vaccine Information Statements, which are available free of charge at the Centers for Disease Control and Prevention (CDC) website ([www.cdc.gov/vaccines](http://www.cdc.gov/vaccines)).

Manufactured by: Dynavax Technologies Corporation, Berkeley, CA 94710 USA

**References:** 1. HEPLISAV-B [package insert]. Berkeley, CA: Dynavax Technologies Corporation; 2017. 2. Centers for Disease Control and Prevention. Recommended immunization schedule for adults aged 19 years or older, United States, 2017. <https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf>. Accessed October 5, 2017.





## Allergan voluntarily recalls textured breast implants

In July 2019, the Food and Drug Administration (FDA) asked Allergan to voluntarily recall certain textured breast implant and tissue expanders due to an increased risk of breast implant-associated anaplastic large cell lymphoma (BIA-ALCL). Allergan complied by conducting a world-wide recall of its BIOCELL textured breast implants and tissue expanders.

### WHAT ARE TEXTURED IMPLANTS?

Textured implants are able to stick to the inside of the breast, which helps the implant to stay in position over time. Only about 10% of the U.S. breast implant market share includes textured implants, but they are fairly common in the rest of the world. Some healthcare providers choose textured implants for patients who have very minimal tissue support, such as patients undergoing reconstructive surgery after breast cancer.

Although several manufacturers produce textured breast implants, Allergan has the most aggressive texture (called BIOCELL), according to **Salvatore Pacella**, M.D., MBA, FACS,

Division Head of Plastic and Reconstructive Surgery at Scripps Health, Scripps MD Anderson Cancer Center, and a HealthTrust Physician Advisor. This texture is what is referred to as “macrotexture,” which creates a tighter adherence of the implant to the inside of the breast. This is different than other “micro-textured” implants, created by other companies, which have a less aggressive texture. The more aggressive texture may contribute to chronic inflammation, which is thought to pre-dispose patients to develop BIA-ALCL.



### THE SCOPE OF THE RISK

While these Allergan devices have been associated with a greater risk of BIA-ALCL, Dr. Pacella notes that this type of lymphoma, and its associated morbidity rate, is very rare. Only around 800 to 1,000 cases have ever been discovered.

“Typically, the act of removing the scar tissue, the capsule and the implant is curative for this,” Dr. Pacella says.



“So even though women may have developed this problem, it is very curable.” Several months ago, Dr. Pacella himself had a patient with BIA-ALCL. He performed a surgery to remove the scar tissue and implant in one piece, and he says the patient is now doing well.

### THE IMPACT OF THE RECALL

This voluntary recall has had a large impact not only on Allergan, but on other textured breast implant producers, Dr. Pacella says. “What you’re seeing in the community is that most plastic surgeons are moving away from using any textured devices, regardless of the company, because of this FDA concern,” he says.

**Jennifer Westendorf**, MSN, RN, CNOR, Director of Surgical Services at HealthTrust, says facilities that have Allergan’s recalled products on consignment should make physicians aware of this recall. They should also review the customer letter sent out by Allergan and collaborate with their local Allergan representative regarding their existing inventory of BIOCELL textured breast implants and tissue expanders. **HT**



### AFTER A WARNING, FDA OKs THE USE OF PACLITAXEL-COATED PRODUCTS

*Update on an article published in the Q3 2019 edition of The Source*

In January 2019, the Food and Drug Administration (FDA) sent out a warning letter to physicians and healthcare providers regarding a late-mortality safety signal with paclitaxel-coated balloons and stents, says **Robin Cunningham**, MSN, RN, Director of Clinical Research at HealthTrust. In August, they released their official recommendations regarding the use of these products.

“The panel unanimously agreed that the short-term benefits of paclitaxel-coated devices for peripheral arterial disease continue to outweigh the risks,” Cunningham says. “Patients who have received these devices had good outcomes for the most part, and for that reason, devices will remain available on the market.”

The FDA determined that physicians who implant a paclitaxel-coated device must diligently monitor patients, and they must properly inform patients regarding the increased rate of long-term mortality (as well as alternative treatment options) before implanting the devices.

In addition, Cunningham says the FDA will change the labeling on these devices to reflect the five-year mortality signal. The FDA will also be working with manufacturers to modify their informed consent to include information about this mortality signal.



## An ideal pharmaceutical supply chain: Quality comes first

*HealthTrust evaluates pharmaceutical supply chains for mission-critical drugs to identify predictors of shortages & key characteristics*

HealthTrust Pharmacy Services recently launched its first products for the Supply Interruption Mitigation Strategies (SIMS) project in order to help combat drug shortages, and their ensuing price increases, in the generic injectables market.

“Once it was clear that shortages would be an ongoing challenge, HealthTrust analyzed whether or not there were particular market and product-specific factors that were common among drugs that eventually experienced a shortage,” says

**Mark Walsh**, PharmD, HealthTrust’s Director of Clinical Pharmacy Strategy. “By working to identify if there were specific predictors of drug







iStock.com/Bong Hyun Jung

Historically, approval from the FDA was the only quality metric that mattered in the sale of generic injectable drugs. “This mentality unfortunately creates very brittle supply chains,” says Walsh.

shortages, HealthTrust could then work to contract for certain mission-critical medications in an innovative way meant to address some of these particular factors.”

Walsh says that in talking through key market predictors of shortages, the terms that continued to appear were “quality” and “supply chain.”

Historically, approval from the Food and Drug Administration (FDA) was the only quality metric that mattered in the sale of generic injectable drugs. This meant that typically, the only key differentiator between like products had been a product’s price. “What this created was an incentive for the manufacturers to maintain the cheapest supply chain in order to achieve the lowest possible cost,” Walsh says. “This mentality

unfortunately creates very brittle supply chains.”

Last year, PGY-2 resident

### **Kathleen Bourget,**

PharmD, now a Director of Clinical Member

Support at HealthTrust,

conducted a research project

in conjunction with the SIMS project.

Bourget’s project identified the ideal characteristics of partner supply chains for mission-critical drugs, in addition to evaluating common weaknesses shared across multiple products.

Bourget’s project mapped the supply chain for mission-critical drugs all the way from the manufacturer’s active pharmaceutical ingredient (API), to the provider, to where the product is actually manufactured and labeled in order to determine who could be viable partners in the SIMS program.

“Many times, when it comes to pharmaceutical contracting, price has been the main driver,” Bourget says. “Here, we’ve taken a step back and decided that for these mission-critical drugs, the quality of a drug’s supply chain should be the main driver.”

Once the supply chain maps were complete, Bourget evaluated them to identify the characteristics that were deemed favorable. The evaluation included whether the manufacturers were vertically integrated (i.e., they manufacture their own API), the location of the API supplier, whether they had redundancy in their manufacturing capabilities and API supply, and the quality profile of the identified locations. Then she looked at different steps in the supply chain—such as whether they were manufacturing these products at different facilities, on different lines, or in different countries—and evaluated how the inherent design of these particular supply chains might behave under various potential stressors. For example, if an API supplier’s warehouse burned down, how would that affect everything downstream for the manufacturers using that API source?

Bourget’s research has supported the SIMS project by helping HealthTrust



determine the ideal characteristics of a SIMS partner's supply chain and identifying which suppliers may be likely candidates to participate in the program.

"For these mission-critical drugs, if you're just relying on price as the key differentiator between products, you may be more likely to suffer from a shortage than evaluating potential partners for the quality and durability of their supply chain," says Bourget.

So far in 2019, HealthTrust has announced the inclusion of three mission-critical molecules in the SIMS program: heparin, propofol and cefazolin. Additional products are scheduled for announcement in Q3-Q4 2019. All HealthTrust Pharmacy members benefit from protections via the SIMS program. Members who commit to purchasing products via the SIMS program can gain additional protections, such as a dedicated safety stock. **HT**

## FLU SHOTS LIKELY DELAYED THIS SEASON

Each year, a Centers for Disease Control and Prevention (CDC) subcommittee attempts to predict which flu strains should be covered in the upcoming year's vaccine. Then, the vaccines go through an approval process from the Food and Drug Administration (FDA) before ultimately going to market.

The CDC subcommittee took longer than usual to identify the selected strains for this year. As a result, flu shot production has been pushed back, according to **Jason Braithwaite**, PharmD, Senior Director of Clinical Pharmacy Services at HealthTrust.



This translates to roughly a one-month delay on flu shots from Sanofi and Seqirus this season, Braithwaite says, adding that all HealthTrust members have been notified of the issue. "We definitely won't have 100% of our capacity at the start of flu season," he says.

In the past, the CDC has failed to accurately predict strains for the flu vaccine, which led to efficacy rates as low as 20%.

"From deciding the strains, to actually having them approved by the FDA and getting them to market is a very short time frame—and it's a guessing game," Braithwaite adds. "But hopefully this delay is going to lead to better effectiveness rates this year in the market."

## Mission possible: Standardizing cardiac care

*New landmark recommendations published for enhanced recovery after cardiac surgery*

As in many specialties, how to best standardize care surrounding cardiac surgery has remained one of the most pressing challenges on the path to the continuous improvement of patient outcomes. This concept took a giant leap forward when the Enhanced Recovery After Cardiac Surgery (ERAS Cardiac) Society issued its first-ever set of consensus recommendations highlighting 22 graded measures to consider for optimizing the process. In May 2019, Guidelines for Perioperative Care in Cardiac Surgery: Enhanced Recovery After Surgery Society Recommendations were published in *JAMA Surgery*.

**The landmark manuscript, endorsed by the ERAS Society, became one of the journal's most downloaded pieces ever and was viewed more than 15,000 times in its first 10 days online.**

"Addressing variability from patient to patient and physician to physician can help reduce surgical complications," explains **V. Seenu Reddy**, M.D., MBA, a HealthTrust Physician Advisor who collaborated on the paper and is listed as an author. Dr. Reddy is also the Surgical Director of the structural heart program at HCA Healthcare's TriStar Centennial Medical Center in Nashville, Tennessee.



Enhanced recovery strategies aren't necessarily generated in response to poor outcomes, Dr. Reddy points out, but rather to improve upon already good results.

**ERAS protocols have been linked with up to 50% reductions in overall complications and length of stays compared with conventional perioperative patient management in noncardiac surgery populations, according to the *JAMA Surgery* paper.**

In addition, there may be substantial savings to the health system from standardization and reductions in complications.

"It's really the other way around, saying we may be doing a pretty good job but want to enhance recovery



after surgery in a multimodal way,” he says. “Surgery is a major undertaking, so how do we streamline and improve it? We looked at the evidence, data and information out there to make each component—preoperative, intraoperative and postoperative—better.”

## KEY RECOMMENDATIONS

In a process that took several years, Dr. Reddy and his collaborators produced the 22 consensus recommendations for optimal perioperative management of cardiac surgery patients after thoroughly reviewing meta-analyses, randomized clinical trials and large nonrandomized studies.

“The beauty is the recommendations aren’t prescriptive—you don’t have to do everything in the document,” Dr. Reddy says. “We’re saying, here are the things that may enhance your patient’s experience before, during and after a surgical procedure. You can decide which ones fit your pattern of care.”

According to Dr. Reddy, some of the most compelling ERAS Cardiac recommendations include:

### Preoperative

- ▶ Carbohydrate loading: A carbohydrate drink two hours before surgery can reduce insulin resistance as it improves postoperative glucose control and promotes the earlier return of gut function. “It helps with hydration, gives the patient an energy boost and benefits intestinal mucosa,” Dr. Reddy explains.
- ▶ Patient engagement tools: Education and counseling before surgery can include explanations of procedures and goals that may help alleviate fear, fatigue and discomfort, promoting recovery and early discharge. “We should offer better and more robust information to patients before they have surgery,” Dr. Reddy suggests. “In cardiac procedures, we can help reduce the levels of anxiety by giving patients a lot of information about what to expect.” It may also help patients set and work toward realistic recovery goals.



### Intraoperative

Surgical site infection reduction: A care bundle that includes topical intranasal therapies to

eradicate staphylococcal colonization, skin preparation, depilation protocols and weight-based cephalosporin infusion should be combined with smoking cessation, adequate glycemic control and other measures to cut the chance of surgical site infections.

### Postoperative

Pain management: “While opioids were until recently the mainstay analgesic choice after cardiac surgery, a multimodal pain management approach is now vital,” Dr. Reddy says. No single pathway exists for an opioid-sparing approach, but evidence backs the use of acetaminophen, tramadol, dexmedetomidine and pregabalin. Patients should also be counseled preoperatively to establish appropriate expectations for postoperative pain and analgesia use.

“Like most other areas in surgery, cardiac surgery was opioid-heavy,” Dr. Reddy says. “This enhanced protocol looked at other ways to be more multimodal in terms of the way surgeons handle postoperative pain management, so patients don’t become dependent upon opioids or suffer from their side effects.”

### PILOT PROGRAM EXPANDED

Enhanced recovery protocols are sweeping the fields of surgery, Dr. Reddy says. At TriStar Centennial, where about 1,200 cardiac surgeries are performed annually, the lead clinical pharmacist approached Dr. Reddy about three years ago to propose a pilot project in enhanced recovery, and he quickly agreed. The project case-matched about 100 patients, finding many benefits, he says, and officials there are in the process of devising core metrics for a sustained effort.

Nationally, the ERAS Cardiac Society is already looking ahead to examining and developing updated guidelines based on new techniques, newer medications and newer assays that may further improve the patient’s surgical experience. “The great part of ERAS is the continuous quality improvement nature of the undertaking and never being entirely satisfied with your results,” says Dr. Reddy.

So, what’s next? Dr. Reddy says that becoming the “next ERAS Cardiac Center of Excellence” is a high priority for TriStar Centennial Medical Center. **HT**



# FORCASTING with analytics



PICTURE THIS SCENARIO ... The monthly financial reports don't look good. You're over budget on supplies. This will elicit the inevitable email from the CFO asking, "What's going on?"

The problem, says **Bill Kellar**, Supply Chain CEO of HCA Healthcare's TriStar Division, "is that summary financial reports often tell us the 'what,' but not the 'why.'"



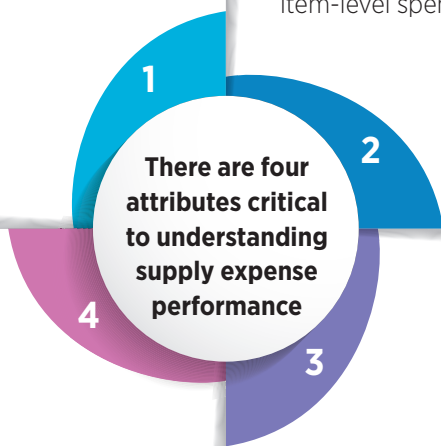
For instance, are surgical volumes up? Is one physician using a more expensive non-contract device? Did procurement strategically order a quarter's worth of devices in one month? "The value indications in terms of spend can be indicative of an operational issue that needs to be resolved," Kellar says.

That was the message he and **Dan Cleeton**, CPA, AVP of Financial Operations for HealthTrust Supply Chain, delivered during their HealthTrust University Conference presentation: *Forecasting Future Performance With Supply Analytics & Reporting*.



A standardized chart of accounts categorizing supply expense spend

A strong control environment advocating purchase order utilization allowing item-level spend reviews



Clinical data facilitating physician and/or service line reviews

Operating indicators enabling volume-adjusted review of supply expense spend

Yet few hospital systems fully integrate these attributes into their supply expense reporting, Cleeton says.

"We chose this topic because it continues to be a discussion point with members," he says. "Strategic supply chain leaders must understand the drivers behind their supply expense performance to connect with their hospital executives."

"The bottom line is that you have to be close to the business and understand what's influencing supply spend."

—Bill Kellar

It all starts with a detailed list of accounts, as granular as possible. "Many of our members budget for overall spend at the aggregate, not category level," Kellar says. For instance, one category might be cardiovascular medical devices, but best practice indicates spend should be further delineated to enable comparison to reported case volumes (for example, heart valves, rhythm management, stents, etc.). Additionally, both spend and case volumes can then be compared to previous year and budgeted totals, to further explain spend variances. Clinical data provides additional insight, enabling supply chain leaders to plan savings initiatives that may affect future supply expense performance.

"The bottom line is that you have to be close to the business and understand what's influencing supply spend," Kellar says. That entails developing relationships with key individuals throughout the facility, such as the operating room director, who can help explain why surgical spend has increased.

And turn to your HealthTrust account manager, he advises. "HealthTrust has the operational expertise to help you get there." **HT**

#### FORECASTING TOTAL SUPPLY EXPENSE & SPEND PER ADJUSTED ADMISSION

Kellar and Cleeton recommend supply chain managers do the following when forecasting their total supply spend:

- ▶ Understand and document current rate, volume and utilization trends.
- ▶ Leverage financial/service line leadership and subject matter experts to identify supply expense growth drivers resulting from strategic growth initiatives.
- ▶ Collaborate with leadership to develop approved supply expense savings plans.
- ▶ Validate that supply expense savings initiatives are properly quantified and classified as either "cost avoidance" or "cost reduction" initiatives.

# It just makes cents

## How HealthTrust Treasury Solutions can streamline processes & save money

FROM COLLECTING PAYMENTS FROM PATIENTS TO PAYING SUPPLIERS, healthcare systems are continually challenged with effectively managing cash flow and avoiding wasted time and money on things like fees and missed payments.

To help members stay on track, HealthTrust offers a comprehensive set of Treasury Solutions that can streamline processes and minimize fees, explains **Kim Allen**, HealthTrust's Senior Director of Strategic Sourcing, Commercial Products.



Here are key examples of how these services can benefit HealthTrust members.

### MONEY GOING OUT:

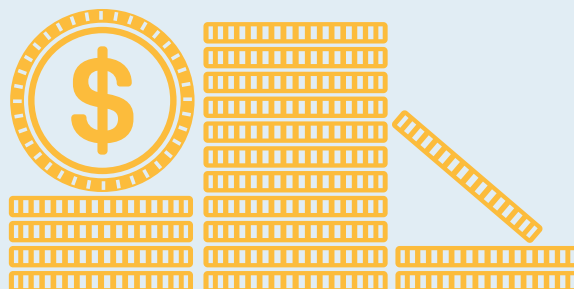
- ▶ **Credit:** Through contracts with American Express and Sun Trust (administering Mastercard and Visa), HealthTrust members can obtain more flexible options for paying their bills. "Hospitals can increase the chances a supplier will accept a credit card for payment when they have more credit card options—such as American Express, Visa and MasterCard—to choose from," Allen explains. HealthTrust members also receive a financial incentive payment based on spend with each credit card company.
- ▶ **ACH (Automated Clearing House) Transactions:** Automating payments to suppliers by opting for ACH cuts the costs and fraud risks of generating and mailing paper checks. Members also receive financial incentive payments based on increasing the number of suppliers they engage in this program. "You can turn your AP Department into an additional income stream while mitigating the risk of fraud and streamlining processes," Allen says.
- ▶ **Accounts Payable Recovery:** An audit of a member's AP spend by Moody's captures events such as transactions that didn't get credited correctly by suppliers, possibly resulting in recoveries for double billing (and double payment), missed rebates and missed product returns. Allen says Moody's recovers those misspent dollars. "That's basically found money for members," she explains.

There's no out-of-pocket member expense, but Moody's retains a percentage of what is recovered.

### MONEY COMING IN:

- ▶ **Merchant Acquiring Services and Products:** Through First Data, HealthTrust offers a single-source merchant acquiring solution for integrated receipt of payments by patients and others to the healthcare system, including point-of-sale solutions, e-Commerce, check/ACH solutions and much more. When receiving payments through credit or debit, for example, members benefit from HealthTrust's negotiated lower rates on merchant processing fees.
- ▶ **Class Action Recovery Services:** At any given time, hundreds of class-action lawsuits are in litigation across the U.S., involving products healthcare facilities routinely purchase—ranging from insurance policies to computer equipment. While many HealthTrust members are likely eligible to participate and to potentially win part of a settlement, they rarely do because the process is time-consuming. "We have a contract with Managed Care Advisory Group to file for class-action lawsuits on behalf of members, recover those dollars and get them back to health systems," Allen says.

To make the most of HealthTrust's Treasury Solutions, Allen recommends visiting the Indirect Spend section of the HealthTrust Member Portal to review specifics. "We'll work with members individually to show the value of each of those solutions to their facility or IDN," she adds. Contact Allen at [kim.allen@healthtrustpg.com](mailto:kim.allen@healthtrustpg.com) for more information. **HT**







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HealthTrust Contract #7678





# The power of COLLABORATION

## Harnessing the value of clinical integration in CQO

*Highlights from AHRMM's  
recent summit & 2019 CQO  
Report with **John Young, M.D.,  
MBA, Chief Medical Officer,  
HealthTrust***

WITHIN THE LAST DECADE, THE ROLE OF THE HEALTHCARE SUPPLY CHAIN HAS SHIFTED INTO HIGH GEAR to become a driving force for change throughout the industry.

Because supply chain professionals touch all areas of healthcare, they are uniquely positioned to lead the way in the Cost, Quality & Outcomes (CQO) movement, which was initiated by the Association for Health Care Resource & Materials Management (AHRMM) in 2013.



## RECOGNIZING THE OPPORTUNITY FOR EFFICIENCY

How did supply chain become front and center? The Affordable Care Act (ACA) set things in motion. It shifted how hospitals and health systems are reimbursed for care and secured a coordinated care model where the patient is at the center. With these changes came an opportunity for supply chain professionals to take their expertise and expand on it to enhance quality, lower costs and improve outcomes.

"Healthcare supply chains haven't always been as sophisticated as they are now," says **John Young, M.D., MBA**, Chief Medical Officer at HealthTrust. He says that in the past, they were more transactional in nature and less connected to the clinical decision-making process. But as hospitals have grown, and with the emergence of new technology (with subsequent escalating costs), hospitals began to focus on the opportunities within the supply chain. "With physician preference items driving a significant component of cost, streamlining and systematizing purchasing decisions became crucial to the overall financial health of the organization," says Dr. Young.

Many procedure-based services are moving to the outpatient environment, and this will certainly lead to more cost pressures and the need to further drive standardization. This is where the aggregation efforts of GPOs can provide significant value. "Aggregating spend across multiple facilities within a health system, or across the large footprint of a GPO, can leverage buying power and create more cost-effective strategies," explains Dr. Young. Product formularies in the areas of medical devices and pharmaceuticals will increasingly become more standardized and benefit the outpatient delivery sites. "Many outpatient or ambulatory sites have their own unique EMR systems that will need to be integrated into the system's data warehouse structure to benchmark performance."

## EMPHASIZING COLLABORATION

AHRMM's recently published CQO Report and summit meeting both emphasized clinical integration as the key to surviving and thriving in today's ever-changing healthcare environment. It defines clinical integration as using a



**"Clinicians are problem solvers by nature and want to be involved in the strategic development of a plan. Getting their input and buy-in early in the process allows for a smoother transition."**

—John Young, M.D., MBA

collaborative approach to deliver patient care with the highest value, which translates to optimal CQO. The report highlights six healthcare organizations at various stages of supply chain maturity, and it reveals the challenges and successes they experienced on their journey to a clinically integrated supply chain.

"One of the biggest challenges is obtaining accurate information," says Dr. Young. "This includes cost data and clinical outcomes, so that transparent conversations can happen with physicians and other key stakeholders about the best way to approach cost, quality and outcomes in a fiduciary way." He notes that while many systems have fully integrated their supply chain functions with operations, financial and clinical input, there are others still struggling with formalizing this type of governance structure.

Supply chain professionals must work to embed themselves with the clinical teams they serve in order to better solve problems. "Supply chain plays a critical role in the overall financial health of an IDN," says Dr. Young. Because of this, he says, "Cost and clinical data need to be combined to define a procedure profile that clinicians can both understand and act on."

Once data is organized in an actionable way, teams can use existing service line structures or create multidisciplinary councils to focus on CQO to establish trust and drive change.

## CASE STUDIES EXEMPLIFY PROGRESS

One of the report's case studies involved a facility that had been working to implement a new hygiene and barrier product in order to reduce the risk of hospital-associated infections (HAIs). (In the U.S., HAIs lead to tens of thousands of patient deaths and billions of dollars in costs annually.) One of the factors that made a positive difference in their process for implementing new products was getting early buy-in

from the nurses who would be using the product.

"Involving clinicians early in the process is a critical step," says Dr. Young. "First, they are the subject matter experts who use the products on a daily basis. Second, there are always unintended consequences with change that the end-user can help anticipate. And finally, all clinicians are problem solvers by nature and want to be involved in the strategic development of a plan. Getting their input and buy-in early in the process allows for a smoother transition through change, and importantly, sustaining that change."

Another case study involved a NICU in a large U.S. children's hospital that decided to change diaper brands to reduce cost—without properly evaluating the new product or



of the system. “As new technology emerges, engaging physicians in the cost discussion as a component of CQO is just another factor that needs to be considered as part of the health of their service line and the system as a whole. This is mutually beneficial to them as well as the patients they care for every day.” **HT**

The health system saw an annual savings of **\$460,000.**

involving end users (NICU nurses). The new diapers ended up causing skin irritations in some of the babies, which needed to be medically addressed, and also led to increased costs and longer lengths of stay, creating a negative impact for patients.

These outcomes could have been avoided if clinical staff had been more involved in the process. “Our approach here at HealthTrust is to run all proposed strategic plans related to contracting categories through one of our clinical advisory boards,” says Dr. Young. These clinical boards consist of member representation and provide important feedback on the product and approach. “The clinical boards won’t send something to the supply chain board for contract award unless it has been fully vetted and supported by clinicians who represent end-users at our member facilities.”

As two of the 2019 CQO Report’s case studies show, physician buy-in is paramount to achieving hospital- or system-wide value analysis. It’s important for physicians to see that improving cost doesn’t have to mean that quality of care or outcomes suffer. “Physicians understand tradeoffs,” says Dr. Young. By sharing economic realities with them, he says that physicians can help shape a strategy that maintains quality and drives unwanted variation and waste out

### PHYSICIAN COLLABORATION LOWERS COSTS, INCREASES QUALITY & OUTCOMES

At HCA Healthcare’s TriStar Health in Nashville, Tennessee, the HealthTrust Supply Chain team noted that the orthopedic surgeons were using many different kinds of antibiotic loaded bone cement (ALBC) while performing knee surgeries. In some cases, patients actually had higher infection rates where ALBC was used.

The Supply Chain team worked collaboratively with clinical leaders at TriStar facilities to compile data and information to build a case for limited use of ALBC. The clinical leaders then used an evidence-based approach to engage the orthopedic surgeons and convince them why change was in their patients’ best interest. Most physicians drastically cut back on using the ALBC and switched to another product. As a result, the health system saw a reduction in infection rates as well as a significant annual savings over two comparable six-month periods.

Defining the goals of the initiative upfront is also crucial in gaining support and keeping the clinicians engaged. “By being honest and transparent with all of this data, a relationship of trust develops between supply chain leaders and clinicians,” says Dr. Young. In addition to the clinical data they are most familiar with, he says that physicians and clinicians gain an understanding of the financial and operational data from a value analysis team. “This is a critical step in making these structures work,” says Dr. Young.



# ARE YOU A SUPPLIER WITH NEW TECHNOLOGY?

**Jan. 15  
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submit**

Submit new technology & innovative products for possible review at the next HealthTrust Innovation Summit in Dallas, Texas  
**March 16-18, 2020**



## ELIGIBILITY

Current and prospective suppliers with new technology directly related to patient care, information technology or supply chain management are invited to submit by Jan. 15, 2020.

"New technology" is classified as a product that, as compared to existing products:

- Offers significant technological advancements,
- Improves clinical outcomes or patient care in a significant way (i.e., documented reduction in procedure times, outcomes, lengths of stay, readmissions, infection rates), or
- Streamlines work processes and/or the economics of facility operations in a significant way (i.e., increase or decrease expenses in supply chain or resource utilization)

Demonstration of the above through independent, peer-reviewed publications is beneficial, but not required.

Application deadline is **Jan. 15, 2020**.

Submit your application here: **<http://healthtrustpg.innovation-center.sgizmo.com/s3/>**

Email questions to **[innovation@healthtrustpg.com](mailto:innovation@healthtrustpg.com)**

# Utilizing a HEART TEAM approach

**Increased options for the care of complex CV patients requires a renewed, collaborative & evidence-based approach to care**

IN TODAY'S MANAGEMENT OF PATIENTS WITH ACUTE MYOCARDIAL INFARCTION WITH CARDIOGENIC SHOCK, high-risk percutaneous coronary intervention (PCI), heart failure and valvular heart disease, the use of advanced technologies is on the rise—with growth rates only expected to increase. As indications are expanded, and usage of these therapies increases, it's more important than ever to provide patient-centered recommendations using a heart team approach.

Patient-centered recommendations take into consideration the patient's wishes, the risk of the various options, the need for additional procedures and quality of life. Utilization of the heart team approach to care is a Class I indication from both the American College of Cardiology (ACC) and the Society of Thoracic Surgeons (STS). The heart team also plays a critical role in monitoring quality on an ongoing basis, defining treatment protocols and standardizing care.

## EXPANDED INDICATIONS FOR CV DEVICES WILL REQUIRE GUIDANCE

TAVR (transcatheter aortic valve replacement) was originally indicated for high-risk patients only. Later, it received approval from the Food and Drug Administration (FDA) for intermediate-risk patients, and in August of 2019, it received FDA approval to be utilized in low-risk patients.

“It's more important than ever to provide patient-centered recommendations using a heart team approach.”

—Kimberly Wright, RN

“In simple terms, it means that this procedure is about to grow exponentially across the marketplace,” says **Robin Cunningham, MSN, RN**, HealthTrust Clinical Research Director. “The approved use in low-risk patients paves the way for an even more rapid expansion, as experts predict the TAVR procedure will begin replacing a large portion of surgical valve replacement volume in the next couple years.”



Similarly, TMVR (transcatheter mitral valve repair) has recently been approved for expanded indications. The only FDA-approved TMVR device on the market, the MitraClip, was originally approved to treat patients with degenerative mitral valve regurgitation. In March 2019, the ACC presented the COAPT clinical trial, which demonstrated that patients with functional mitral regurgitation had a decrease in hospitalization and an improved quality of life. Subsequently, the FDA approved the device for functional mitral regurgitation as well.

“For the MitraClip to get this kind of indication from the FDA is significant,” Cunningham explains, “since aortic valve and mitral valve diseases are the two predominant valve disorders across the world.”





A heart team approach to these two devices will help ensure that this “explosive growth” is guided by evidence and collaboration. Cunningham says, “One of the Centers for Medicare & Medicaid Services (CMS) requirements for TAVR and TMVR is that there be a heart team approach. The facility that makes the decision to perform these procedures needs to have in place, and participating on every case, a heart surgeon, interventional cardiologist, clinicians and specific equipment.” The CMS also requires the collection and recording of data to monitor outcomes.

This mindset is at the heart of making sure these devices are used properly to improve healthcare, Cunningham says.

**The CMS has not yet approved reimbursement for the TMVR under the indication of functional mitral regurgitation. The CMS has opened it up for public comment, and a decision is expected in May 2020.**

“At the end of the day, you want these patients to recover in a way that is successful.”

### **INCREASED USE OF IMPELLA HIGHLIGHTS THE NEED FOR A HEART TEAM**

The Impella CP (Abiomed) is approved to provide support in patients with an acute myocardial infarction complicated by cardiogenic shock (AMI-CS). Designed for short-term support, these devices are intended as a bridge for myocardial recovery, or as a bridge to further therapies such as an implantable heart assist device or cardiac transplantation. Another cardiac assist device, the Impella RP (Abiomed), is

approved for emergency, temporary support of the right ventricle.

Historically, in-hospital mortality for AMI-CS has been about 30%, based on data from the ACC Cath/PCI registry. Recent evidence and clinical trials (see graphic below) have shown mixed results when evaluating the impact of Impella use on mortality rates, compared to other mechanical support devices and conservative medical therapy.

In fact, among HealthTrust members, between 2017 and 2018, the use of Impella devices for Medicare beneficiaries increased by 53%, while mortality rates during the same period remained near 30% (27.75%).

Impella therapy requires a more collaborative approach to decision-making due to the complexity and severity of patients with AMI-CS, according to HealthTrust AVP of Clinical Data Solutions **Kimberly Wright, RN**. “Heart teams should monitor real-world outcomes for their patients with AMI-CS to guide appropriate patient selection and application



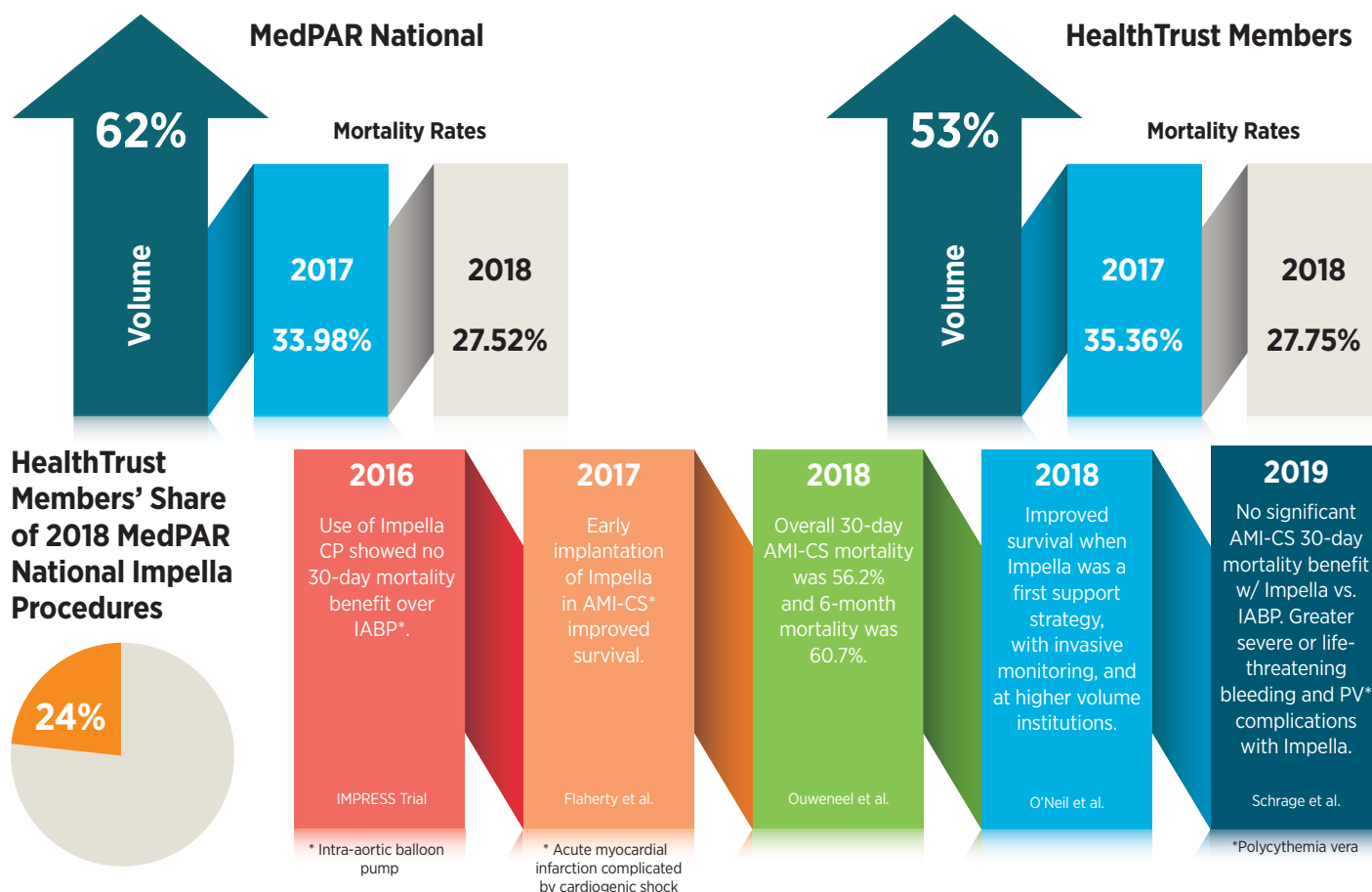
of best practices for these high-risk and resource-intensive patients,” she says.

In May of this year, the FDA issued a warning to cardiologists, cardiothoracic surgeons and transplant surgeons that the post-approval data for Impella RP indicated a lower survival rate compared to premarket survival rates. The FDA approved revised labeling for the Impella RP System to better identify the sub-group of patients most likely to benefit from the device.

“Given the complexity of patients and expansion of advanced therapies, analysis of care quality, appropriateness and patient outcomes has never been more important,” Wright says. “The HealthTrust team is uniquely poised to assist hospitals with this goal.” **HT**

**FOR MORE INFORMATION** on HealthTrust care redesign and on-site assessments, contact Kimberly Wright at [kimberly.wright@healthtrustpg.com](mailto:kimberly.wright@healthtrustpg.com)

### Trends in Impella Volume & Mortality Rates





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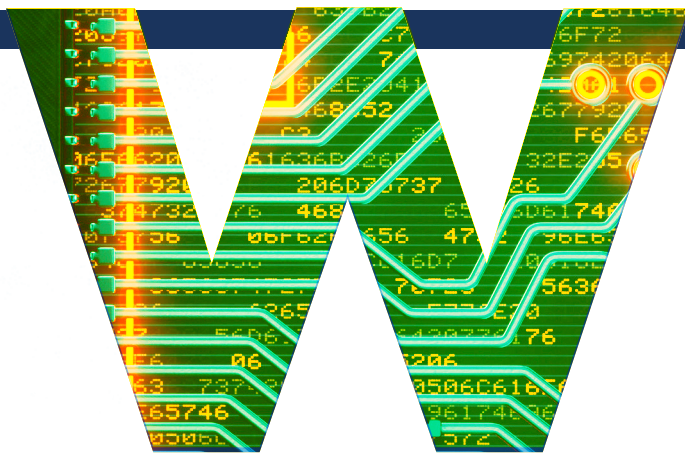


Consider this EYE ON INNOVATION

# MAN & MACHINE

Surgeon & entrepreneur shares how AI & disruptive innovation are revolutionizing his practice





**William Payne, M.D.**, is always looking for the latest ways to integrate technology into his practice. An orthopedic surgeon at Franciscan Health in Olympia Fields, Illinois, Dr. Payne is also a healthcare executive, an entrepreneur and a Health-Trust Physician Advisor. Recognizing the value of technology as a vital tool in healthcare, Dr. Payne co-founded **myowndocor.com**, a telemedicine and population health platform helping providers virtualize care, educate patients and caregivers, perform remote monitoring and help care teams coordinate with each other. For Dr. Payne, the future is now: He also uses artificial intelligence (AI) in his operating room and sees “disruptive innovation” as a driving force in patient care.



We spoke with Dr. Payne about his vision for how AI and disruptive innovation have transformed his practice, and how he sees them shaping the future of orthopedic surgery.

### **Why is disruptive innovation influential in healthcare and how is its role growing?**

**DR. PAYNE:** Disruptive innovation is important in healthcare because of the amount of material that must be consumed. For example, about 8,000 new pieces of healthcare literature are published each day. No single person can read it all, but through algorithmic analysis of structured data, a machine can. A machine can take, for example, an identified genetic mutation associated with a disease like cancer and attach the literature, clinical evidence or trial results for that very specific patient. Machines can harness information and insight in a way that would be too difficult for any one person.

As computer and information technology capabilities become faster and more robust, opportunities for disruptive innovation will increase. About 80% of data in healthcare is unstructured and unorganized, so we have to be able to pull out the nuggets of truth. Machines are now better able to do

that, finding trends before a person could. For example, Franciscan Health is using software to examine all hospitalized patients’ vitals, doctors’ notes and lab values to predict when that patient could run into trouble with something like sepsis. Those kinds of innovations are the breakthroughs patients want. It’s like having your own individual doctor focused only on you 24 hours a day, seven days a week.

### **How has innovation been optimally applied in orthopedic surgery?**

**DR. PAYNE:** Computerized assisted navigation allows orthopedic surgeons to use robotic technology to help position screws, prostheses or tunnels in the bone. That’s been exciting, because it makes the procedures more reliable across many different users and patient variations.

### **In a 2018 Advisory Board survey, more than one-third of respondents said they expect AI to add “transformative value” to their systems and up to 12% currently utilize AI. How do you incorporate AI into your practice? Do most orthopedic surgery practices embrace AI?**

**DR. PAYNE:** I work with a robot enabled with AI to help position screws in the pedicle of the spine when doing lumbar fusion surgery. When I perform hip surgery, I also rely on computer assistance to place the socket and AI to position the cup, as well as with the placement and alignment of the artificial joint in knee replacement surgery.

I think every orthopedic surgeon is looking for ways to make their surgeries more reliable, faster and better for the patient, so they’re exploring how these technologies can enhance what they do. While most practices embrace innovation, they really want to make sure it’s actually improving upon what they already have.

### **What other ways can orthopedic surgeons potentially expand the use of AI in the future?**

**DR. PAYNE:** We’ll see many different uses of AI going forward. For example, [technology could] help predict that a patient is having a balance problem or is at risk for a fall. Based on a set of characteristics—whether it be the number of steps they took in their house or a transducer in their watch that measures changes in their balance—you could proactively avoid some of the falls or treat problems before they become severe. That’s where it gets exciting—being able to recognize trends early and preventing bad things from happening. **HT**



# ON THE PULSE

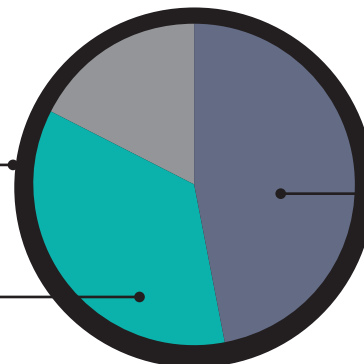
## Latest trends in cardiac health

### Prevalence of cardiovascular disease

By 2035, more than 130 million adults, or 45.1% of the U.S. population, are projected to have some form of CVD.

In 2035 total costs of CVD are expected to reach **\$1.1 trillion.**

Indirect costs are estimated to reach **\$368 billion.**



Direct medical costs are projected to reach **\$748.7 billion.**

Source: American Heart Association's Heart Disease and Stroke Statistics – 2019 Update



## Heart disease & blood pressure

**≈50%** American adults are impacted by heart disease.

**116.4M** U.S. adults have high blood pressure.

Source: American Heart Association's Heart Disease and Stroke Statistics – 2019 Update

**1/3** of adults worldwide have high blood pressure.

Source: [www.heart.org](http://www.heart.org)

**High blood pressure is the most common cause of heart disease-related deaths.**

Source: [www.heart.org](http://www.heart.org)

## Status of heart failure patients



Care demand is increasing:  
**600,000 patients** are estimated to be living with advanced heart failure in the U.S.<sup>1</sup>



Patients are living longer:  
**11% decrease in mortality** at 5 years following heart failure diagnosis<sup>2</sup>

<sup>1</sup> Stage 3 or stage 4 heart failure

<sup>2</sup> Following myocardial infarction; comparing 2001-2010 mortality to 1991-2000 mortality

Source: AHA's Heart Disease and Stroke Statistics—2017 Update from The Advisory Board. Cardiovascular Market Trends – February 2019

## Antibiotic

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<sup>1</sup>Pancholi P, et al. Multicenter evaluation of the Accelerate PhenoTest™ BC kit. *J Clin Microbiol*. 2018. Copyright © & TM 2019 Accelerate Diagnostics, Inc. All Rights Reserved.

THERE'S NO SUCH THING AS TOO MANY GREAT IDEAS. That's why, for the first time ever, HealthTrust has awarded two Innovation Grants to members with impressive initiatives for advancing healthcare performance. During the HealthTrust University Conference in mid-August, Boston Medical Center (BMC) and Centura Health were recognized.

As recipients of 2019 grants, both teams will receive \$25,000 in cash and \$25,000 in the form of consulting support from HealthTrust. Here's a look at each team's innovative plans and goals.



(From left to right)  
Clint Hinman, PharmD, MPH  
Lindi Lewis, PharmD, BCACP  
Julie Prince, PharmD, BCPS



**Centura Health**

**Two teams demonstrate  
the ripple effects  
of innovation**

# TRANS



**Boston Medical Center**

(From left to right)  
David McAneny, M.D.  
Donna Amado, RN, MSN  
Jeffrey Kalish, M.D.  
Tracey Dechert, M.D.  
Alik Farber, M.D.  
Ingrid Rush, RN, MHA  
Katherine Scanlon, RN, MSN  
Pamela Rosenkranz, BSN, M.Ed





# FORMING care

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## Boston Medical Center

## HIGH-PERFORMANCE OPERATING ROOM TEAMS (HPTs)

It's difficult to pinpoint the proportion of surgery-specific errors that contribute to the deaths of hospitalized patients each year. But with approximately 50 million operations performed annually in the U.S.—and medical complications believed to occur in up to 5 million of these cases—a group from BMC decided it was worth taking strong measures to cut the possibility of such outcomes.

At a national conference of the American College of Surgeons National Surgical Quality Improvement Program (NSQIP) earlier this decade, a seed was firmly planted in the minds of attendees **Pamela Rosenkranz**, BSN, M.Ed, Director of Clinical Quality and Patient Safety in the Department of Surgery, and **David McAneny**, M.D., Vice Chair of the Department of Surgery. The idea was that the “best place to start if you want to reduce surgical complications is creating specialized teams,” Rosenkranz recalls. “We looked at each other and said, ‘Why don’t we have a dedicated OR team?’”

To start, Rosenkranz and McAneny aimed specifically at vascular surgery, based on data indicating that these patients experienced higher rates of surgical site infections compared to other surgical specialties. They approached **Alik Farber**, M.D., MBA, FACS, Chief of the Division of Vascular and Endovascular Surgery, who went all-in on the proposal.

“We felt there was a lot of promise to not only improve operations but also clinical and social outcomes,” Dr. Farber says.

In 2015, the hospital launched its dedicated HPT in the OR for the vascular surgery service, including nurses, vascular surgeons, OR technologists, a service line coordinator, a nurse manager, an anesthesiologist and a quality improvement coordinator/facilitator. Robust data strongly supported the pilot initiative, indicating dedicated OR teams could reduce the likelihood of errors and postoperative complications.

Team goals were many, including developing positive working relationships, creating a culture conducive to sharing and analyzing experiences, improving process efficiency, enhancing patient and staff satisfaction and, ultimately, improving patient outcomes. Every other week, team members met—some coming in on their days off—to standardize OR procedures, such as patient preparation, by diagramming every major vascular operation. They would then gather in the hospital's simulation lab to practice each newly refined approach.

## COMMUNICATION AS A BEDROCK OF SUCCESS

Disrupted communication has proven to be hazardous for unintended surgical events, including retained instruments in the patient, wrong side/wrong site operations or procedures, and other adverse events.

“Everyone was invested and energetic, and everyone had a voice. When we were in the operating room, what a difference that made in terms of improved personal interactions.”

—Pamela Rosenkranz, BSN, M.Ed



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A 2016 report found that communication breakdowns were responsible for 26% of malpractice claims related to surgery. As a result, one of the BMC's team goals was optimizing communication by building open, transparent relationships. At the first meeting, everyone introduced themselves by their first name and last name only and revealed something about themselves outside the hospital that others might not have known.

“Everyone was on equal ground and got to know each other on a very personal level. It was amazing,” Rosenkranz says. “You could just see how the dynamics of that group changed.”

The team then took a mock patient from the OR's holding area through the entire surgical process, analyzing each person's role in the work stream. “It was amazing how many areas we uncovered from doing that exercise that needed work,” Rosenkranz says. “A lot of staff were leaving to get equipment they didn't have, and the surgeons didn't always have the right instruments. So we came up with a standardized major kit, minor kit and vascular cart.”

“Everyone was invested and energetic, and everyone had a voice,” she adds. “When we were in the operating room, what a difference that made in terms of improved personal interactions.”

*Continued on page 36*



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\* Andrew, Julie. Q2 2019 User Satisfaction Ratings -  
Patient Monitoring Report. [md buyline](#) 2019.

\* Andrew, Julie. Q2 2019 User Satisfaction Ratings -  
Telemetry Monitor Report. [md buyline](#) 2019.

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Continued from page 34



“It’s a huge change and an objective improvement in a clinical outcome that I relate directly to the team and the way it worked together.”

—Alik Farber, M.D., MBA, FACS

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Farber also helped set up a process map to ensure that surgeries would begin on time. Its success led BMC to adopt the approach for all of its ORs.

**The process map showed improvements  
in first-case starts from**

**40% to 80%.**

### TANGIBLE RESULTS

The team’s overall impact was quickly tangible, with the Vascular Surgery HPT pilot leading to standardization of OR kits/preference carts and preoperative skin preparation along with intraoperative communication. Additional results included a decrease in OR traffic, the creation of a process map for first starts and a decrease in disruptive behavior.

Teamwork also led to a reduction in surgical site infections after leg bypass operations with the American College of Surgeons NSQIP data Odds Ratio improving from the 10th decile (1.75) to the 3rd decile (0.89).

“It’s a huge change and an objective improvement in a clinical outcome that I relate directly to the team and the way it worked together,” Dr. Farber says.

“Everything we did also had an impact on efficiency and staff satisfaction, which enhanced patient satisfaction,” Rosenkranz adds. “It was a win-win situation.”

### RIPPLE EFFECTS

With the help of the HealthTrust Innovation Grant, BMC hopes the success of the pilot Vascular Surgery HPT will spread to other surgical specialties within the organization, with the intention to reduce errors and costs while improving patient outcomes. Three additional HPTs will be formed over the coming year, with the first incorporating vascular with cardiac, thoracic and transplant surgeries. The second team will include trauma, acute care and pediatric surgeries, while the third will cover minimally invasive, bariatric, colorectal and oncological surgeries.

The ultimate goal is for these efforts to ripple out to eventually include several other departments and specialties. Six domains have been defined to objectively measure gains from the new HPTs, including operational efficiency, quality, cost, staff and patient satisfaction, as well as relational coordination, a validated tool that measures teamwork across multiple industries, including healthcare.

The success of the HPT initiative can also be attributed to the backing it received from BMC’s executive leadership team and OR executive committee, Rosenkranz says.

“They are 100% supportive of this, because the goal is to create a culture of safety,” she says. “We feel if we have that, staff will want to come to work and do the best job they can. We want people to love what they do and like the people they work with. Staff satisfaction goes hand-in-hand with patient satisfaction.”

Continued on page 38





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## Centura Health

### PHARMACY REFERRALS TO DIGITAL CARE CENTER

Clinical pharmacists are an important part of an interdisciplinary healthcare team. They provide expertise on safe medication use, including dosing, drug interactions, side effects and optimizing drug therapy. Due to the expansion of the Centura Health Provider Group, it was not possible to physically place a pharmacist at each clinic. To keep up with these challenges, Centura launched a digital care center, so

patients visiting clinics could join a videoconference with a pharmacist.

Expanding the service within the first two years to more than 20 clinics and seeing a nearly four-fold monthly increase in patients served, Centura must keep up with the demand to serve its patients. The health system will use its HealthTrust Innovation Grant to help fuel the creation of a pharmacy referral process to the digital care center within the electronic health record.

Driven by team members **Clint Hinman**, PharmD, MPH, Vice President of Pharmacy; **Lindi Lewis**, PharmD, BCACP, Telehealth Pharmacist Lead; and **Julie Prince**, PharmD, BCPS, Corporate Clinical Pharmacy Manager, the move will allow providers to refer any patient they feel would benefit from videoconferencing with a pharmacist while simultaneously lowering the burden on clinic office staff.

Ultimately, the end game is to enable the pharmacist to complete comprehensive medication management while using approved collaborative drug therapy management protocols for established disease states. The process complements the care provided by a patient's primary care provider.

"This is an easier way for doctors to identify patients who need help from pharmacy. For example, by moving to comprehensive medication management, we can help to manage someone's diabetes or hypertension by using approved protocols," Lewis says.

### EXPANSION PROMPTS SERVICE LAUNCH

Knowing how far Centura has come to reach this point requires a look back at where team members began. Several years ago, the idea of a remote pharmacist videoconferencing with patients visiting their primary care doctors for wellness checkups or after hospital discharge increasingly began to make sense.

At-risk patients with various disease states, such as chronic kidney disease or heart failure, began to be identified



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*Continued from page 38*

through a risk-stratifying scoring tool built into the electronic health record system that identifies patients most likely to benefit from ambulatory pharmacist intervention and scheduled for an upcoming visit with their provider. A list of eligible patients is sent to their primary provider, and those patients are contacted and asked to come in 30 minutes early and set up on an iPad to videoconference with the pharmacist located remotely at the digital care center.

During this conversation, the pharmacist performs an in-depth medication review with the patient, identifying medication issues along with missing lab tests and vaccinations. Recommendations are then sent to the patient's PCP through a documented note in the electronic health record before the provider enters the patient's room and conducts the medical visit.

"These patients need additional oversight with their meds and next steps," explains Lewis, who conducts the remote assessments. "I'm looking at meds to see if they're appropriate, making sure they're dosed correctly and that there are no adverse reactions. I also ask the patient about side effects or check on compliance, to see if perhaps they're not taking their medication because of cost or another issue."

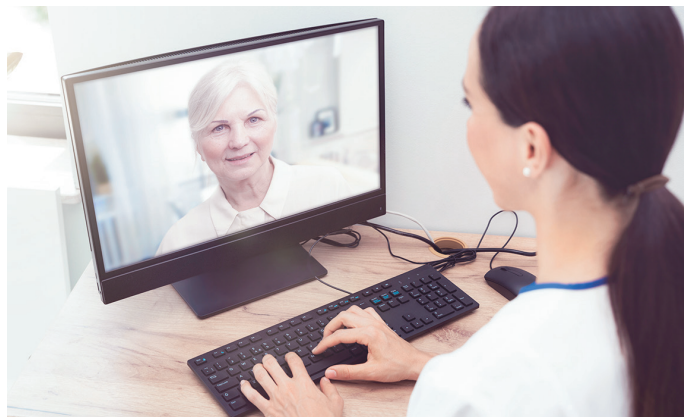
## IMPRESSIVE RESPONSE

Centura has seen a continuous increase in volume since implementing the digital care center. The center served an average of 6.5 patients per month in its first year, with the average nearly doubling in 2018.

**The center is currently serving 24.9 patients per month. While 93% of patients had never used videoconferencing with a healthcare provider prior to Centura's digital care center, once a videoconference with a pharmacist was scheduled, 87% of patients completed those visits.**

**Survey results have shown a positive impact even with 85% of patients feeling overall knowledge of their medications prior to the visit was good, very good or excellent. When asked if they'd likely schedule or request a future virtual conference with a pharmacist, more than half (69%) responded with yes.**

Physicians, too, have been supportive and enthusiastic because the program decreased the amount of time they need to review and counsel patients regarding medication management. For many, exposure to the virtual pharmacy was the first step into telehealth. One participating physician reports, "Virtual pharmacy just makes sense and could easily be a quickly expanding platform." More than 80% of physicians responding to a survey found pharmacist



istock.com/simpson33

recommendations to be helpful and 60% stated they were very helpful.

## REFINING AND TRACKING RESULTS

Still, team members are clear-eyed about problems in the virtual pharmacy's current model. In clinics, the burden of contacting patients to schedule a pharmacist videoconference falls mainly on medical assistants and patient service representatives. But some locations simply don't have the capacity to add scheduling to these staff members' existing workloads, limiting the number of patients who can benefit from the service.

As the sole pharmacist in the program, Lewis has also been swamped, currently receiving help from four pharmacy residents. "But we have another pharmacist starting," Prince notes, "so we're hoping we can reach more patients."

With the help of the Innovation Grant, Centura plans to address those shortcomings by enabling physicians to refer patients they feel might benefit from virtual pharmacy visits while also reducing office staff workload. The grant's service line component will lend consulting services to the effort, particularly in technology, lean process, project management, data mining, report development, and training and mentorship.

Existing metrics tracking pharmacy telehealth visits will be augmented by monitoring the number of patient referrals made by physicians to pharmacy each quarter, with the goal of continual growth. Additionally, the number of patients being assisted through a collaborative drug therapy management protocol will be tracked, and patient and provider satisfaction will be monitored through surveys.

"I'd like to see continued growth in the number of patients on comprehensive drug therapy management, so we can get to a larger population where we can track good quality outcomes. The ultimate goal is positively impacting patients and their overall quality of life," Hinman adds. **HT**



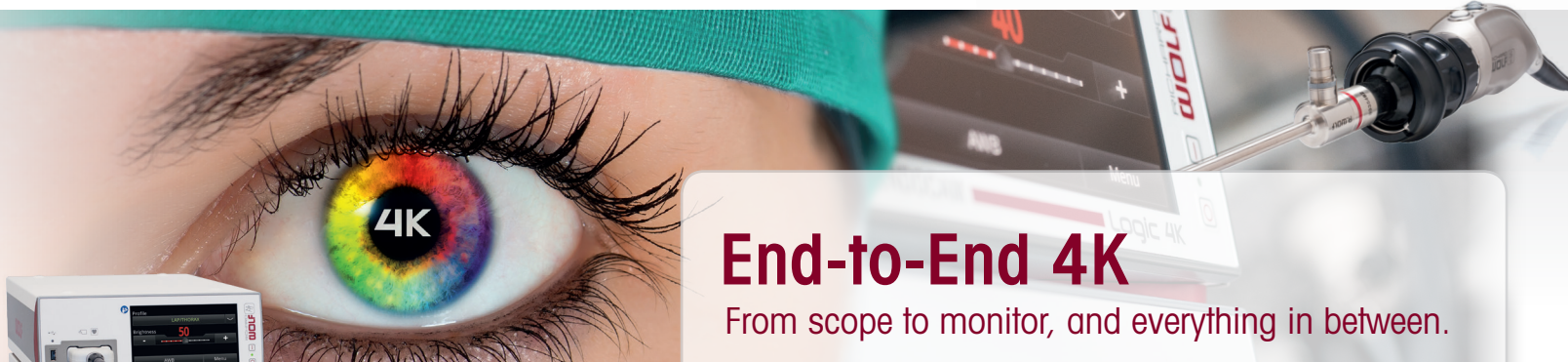
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COE accreditation**



CONEMAUGH MEMORIAL MEDICAL CENTER IN JOHNSTOWN, PENNSYLVANIA, IS LOCATED IN A VERY RURAL AREA OF THE STATE. Patients often have to travel great distances for cardiac care, says **Genevieve Everett-Sigwalt**, M.D., a cardiologist with Conemaugh Memorial Medical Center. Before they invest in making the trip, patients want to know they'll be getting comprehensive, quality care.



To help make this pledge to patients, Conemaugh Memorial Medical Center sought accreditation to become a cardiac Center of Excellence (COE). In late 2018, the hospital earned the HeartCARE Center Award, which is a national distinction from the American College of Cardiology (ACC). It was the first hospital in the southwest region of Pennsylvania and the fifth hospital in the nation to receive this award.

"Having that designation lets patients know that it's a place they can come to that's worth the ride. It has all of the team members they need in order to get care for various cardiac issues from one facility," says Dr. Everett-Sigwalt, who is also a HealthTrust Physician Advisor.

### THE VALUE OF THE COE ACCREDITATION

In 2015, over 40% of Americans had at least one cardiovascular (CV) condition, a number that is expected to reach nearly 50% by 2035, according to the American Heart Association (AHA) Cardiovascular Disease Burden Report. In 2016, cardiovascular disease (CVD) cost the U.S. healthcare system \$555 billion, according to the same report. This cost is projected to reach \$1.1 trillion by 2035.

Medical costs for CV conditions and related procedures are skyrocketing. In order to keep up with rising demand while offering patients the best care possible, many healthcare facilities, like Conemaugh Memorial Medical Center, are pursuing cardiac COE accreditation. Not only can being a COE help a facility refine and improve its service line, but it also gives community members confidence that they're accessing the best care possible for their CVD.

There is no standardized term for defining a COE, nor is there an official governing body, says **Kimberly Wright**, RN, AVP of Clinical Data Solutions at HealthTrust. The AHA, The Joint Commission, the ACC and several different independent companies (such as the Accreditation for



Cardiovascular Excellence) have COE accreditations. In addition, insurance companies, such as Aetna, Cigna and Blue Cross Blue Shield, have their own COE accreditations.

Because there are many different cardiac COE accreditations, it's important for facilities to do their due diligence by selecting an accreditation that is not only well recognized, but one that also fits their hospital's unique needs. Wright says that regardless of which certification a hospital pursues, the accreditation process itself is valuable, as it allows a hospital to have a discerning, objective outsider look at where improvements could be made.

"It allows you to have an external eye come in and look at your program objectively, comparing it against the standards and helping you identify where you might have gaps and where you could improve or standardize care," she says.

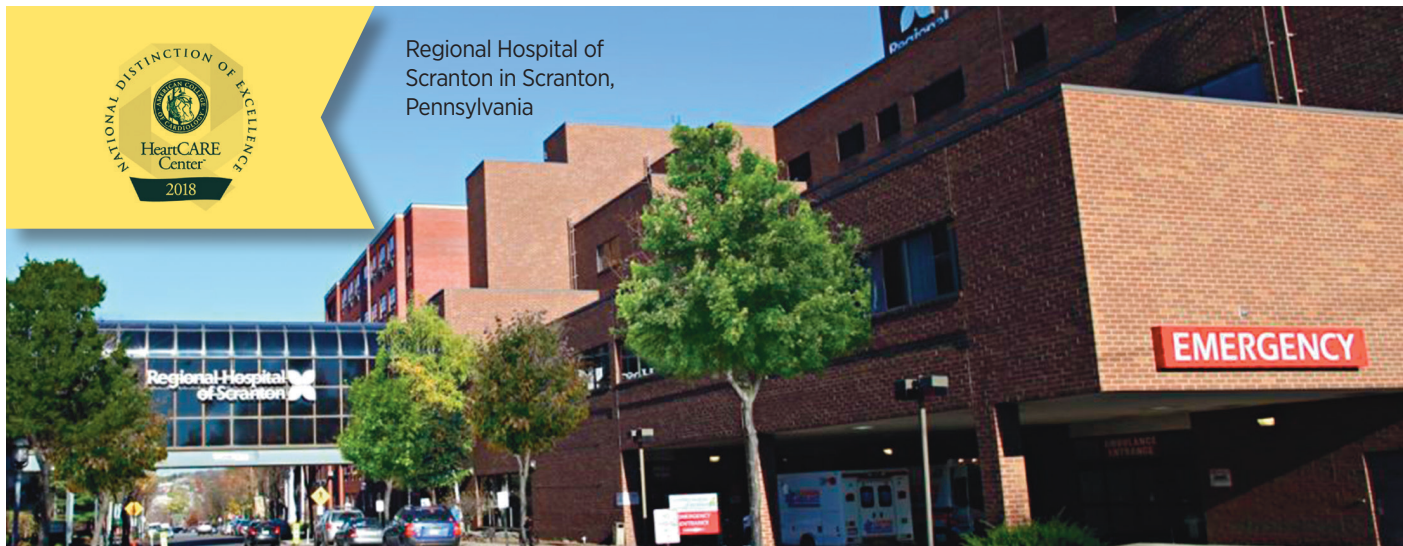
In 2015, over  
**40%**  
of Americans had at least  
one cardiovascular (CV)  
condition, a number that is  
expected to reach nearly  
**50%**  
by 2035.

### RELIABILITY, CREDIBILITY & ACCOUNTABILITY

Being accredited as a COE has a number of benefits, Wright explains. It helps hospitals have a service line approach, establish interdisciplinary collaboration between the various physicians and units, monitor their outcomes, and improve long-term results due to often mandatory participation in databases and registries.

Community Health Systems' (CHS) Commonwealth Health Heart and Vascular Institute at Regional Hospital of Scranton, Pennsylvania, was named an inaugural recipient of the





HeartCARE Center Award in 2018. **Lynn Simon**, M.D., MBA, Chief Medical Officer and President of Clinical Operations at CHS, says cardiac accreditation has always been a priority for CHS. In fact, the health system has 111 ACC accreditations across 88 hospitals.



Dr. Simon says pursuing these accreditations is a priority for CHS, because having that service line framework demonstrates a commitment to making sure certain standards are met—not only related to physicians, the infrastructure and the cardiac services offered, but also standards as they relate to clinical outcomes.

“I think in some markets, having certain certifications or accreditations provides a nice public perception—both for the community and with payers—related to the commitment to the service line and the commitment to quality,” Dr. Simon says.

She believes having that third-party, objective accreditation offers an additional credibility factor for a hospital. “It’s not just this hospital talking about how good they are, but they actually have a national organization that has put its stamp of approval on the program,” she says. “I think that adds to the reliability and credibility consumers want.”

*Continued on page 46*

## CMS PROPOSES CHANGE TO RULE IN THE CV SPACE

The Centers for Medicare & Medicaid Services (CMS) has proposed changes for next year regarding payment rates and regulations for the Hospital Outpatient Prospective Payment System. These proposed rule changes would shift reimbursements to the outpatient setting, which will force cardiovascular service lines to deliver care, despite shrinking margins.

**Patrick Bridges**, RCIS, MBA, Clinical Director for HealthTrust, says that under this proposed rule, CV procedures that have historically been done in the hospital setting—such as coronary stent and cardiac rhythm device implant procedures—would instead be done in an outpatient setting.



“Hospitals will be forced to make a decision: Either pivot from the current strategy of advanced hybrid procedural rooms toward an outpatient ASC joint-venture strategy, or do nothing at all,” Bridges says. “If hospitals choose to carry on as usual, they will miss the opportunity to minimize the impact of the shift in procedural landscape.”

The major concern regarding this proposed rule change, Bridges explains, is that these traditional interventional cardiac procedures generate a significant amount of revenue for a hospital. Shifting these typically high-margin procedures out of the hospital could put a tremendous amount of financial stress on an organization. Adopting this proposed rule and moving certain procedures out of the hospital would require a significant shift in strategy, Bridges says.

Regardless of how a hospital interprets the proposed rule, Bridges says it’s wise to pivot on the strategy and be proactive. “If they’re not proactive, the potential loss of the service line revenue could have a major impact on the organization as a whole.”





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## WHAT IS THE HEARTCARE CENTER DISTINCTION?

Two HealthTrust member hospitals, Conemaugh Memorial Medical Center and Commonwealth Health's Regional Hospital of Scranton, were inaugural recipients of the distinguished HeartCARE Center Award from the ACC. To be awarded this accreditation, a facility must:

- ▶ Have earned two CV accreditations from the ACC
- ▶ Participate in a National Cardiovascular Data Registry (NCDR) or have earned a third accreditation from the ACC
- ▶ Have a minimum of two ACC Member CV champions
- ▶ Participate annually in at least one of the following:
  - The ACC Quality Improvement Clinical Toolkit
  - The ACC Quality Improvement Campaign
  - Conduct public reporting in an eligible NCDR registry
  - Submit an abstract related to quality of care to an ACC conference
  - Submit a manuscript related to quality of care to a peer-reviewed journal

In addition, facilities that offer cardiothoracic surgery must publicly report their surgical outcomes to the Society of Thoracic Surgeons (STS).



Learn more at  
[cvquality.acc.org/accreditation](http://cvquality.acc.org/accreditation)

Continued on page 47



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Continued from page 46

In addition to its status as an inaugural recipient of the HeartCARE Center Award, CHS' Commonwealth Health Heart and Vascular Institute at Regional Hospital of Scranton was the first in its market to achieve various other accreditations, such as the Cardiovascular Center of Excellence designation with the AHA. It was also the first in the nation to receive Cardiac Catheterization Lab Accreditation from The Joint Commission.

Striving toward clinical excellence through COE accreditation, Dr. Simon says, has improved both the internal and external perception of the hospital. "The hospital has been very active in the space, and I think it's been great as far as promoting itself in their market," she says.

## PREPARING FOR CV ACCREDITATION

HealthTrust offers several CV services for its members, including cardiac care redesign and cardiac on-site assessments.

The Cardiac Care Redesign team, which Wright leads, goes into HealthTrust member hospitals and assesses their CV service line as if it were being accredited by a governing body, such as The Joint Commission or the ACC. The goal of these HealthTrust services is to prepare hospitals for accreditation should they ever want to pursue it.

"We look at their outcomes, structure and processes they have in place to identify any gaps they might have," Wright says. "And then we assist them with tools and guidance to help implement the things they don't have so that if they do want to pursue accreditation, they're better prepared." **HT**

**For more information on HealthTrust care redesign and on-site assessments, contact Kimberly Wright at [kimberly.wright@healthtrustpg.com](mailto:kimberly.wright@healthtrustpg.com)**

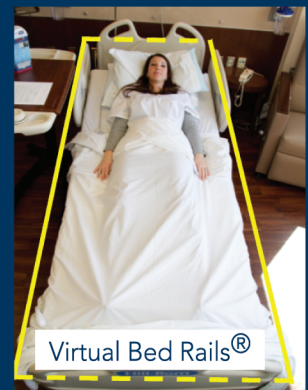
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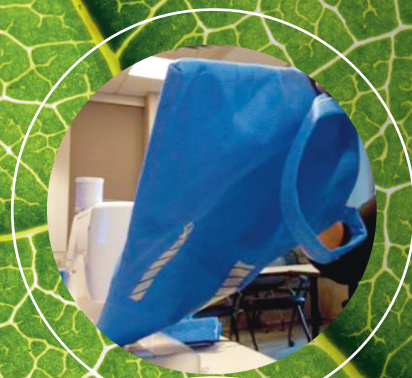
# GOING GREEN

## with grassroots efforts

**How simple changes in operations can make a big difference**

INCREASINGLY, HOSPITALS AND HEALTH SYSTEMS ACROSS THE COUNTRY CONTINUE TO FIND WAYS TO PROTECT THE PLANET, while simultaneously reaping the benefits of efficiency and, sometimes, cost savings. Studies also indicate that sustainable actions can help improve an organization's public perception and lead to increased productivity and a happier staff.

While sweeping changes like installing a new energy system are often thought of as a necessary step, smaller, more concerted efforts within everyday operations can make an impact in improving efficiency and reducing waste.





“There are so many touchpoints where hospitals and health systems can affect positive changes, from the supply chain to how patients are treated,” says **Zoë Beck**, HealthTrust Sustainability Manager. “The healthcare community is a huge consumer of goods with a large supplier base that manufactures those goods. Since hospitals operate 24/7, they are a major consumer of energy. All these things mean there’s a lot of space to have an impact.”



Here are just a few ways members are finding those spaces and making a difference.

### GETTING CREATIVE

Atlantic Health System’s Overlook Medical Center, located in Summit, New Jersey, has reduced its environmental footprint through recycling and energy savings initiatives while at the same time finding unique ways to champion sustainability within the communities it serves.

Achieving this level of success comes with challenges, admits **Melissa Bonassisa**, RDMS, Medical Imaging Supervisor, Overlook Medical Center, and Co-chair of Overlook’s Sustainability Committee, also known as the Green Team. “Healthcare is unique. We’re always juggling environmentally correct decisions and ways to manage infection control—meaning we cannot safely reuse everything. Our top priority is always patient safety and high-quality care, so it is a challenge to find opportunities in which we can also keep our environment safe.”



Here’s a look at two programs Overlook has implemented to creatively champion its commitment to sustainability.

Overlook recently began repurposing a massive amount of surgical blue wrap that covers sterile surgical instruments and materials. This non-biodegradable material is typically thrown away while still sterile, which, according to the U.S. Environmental Protection Agency, amounts to nearly 255 million pounds of annual OR waste.

**Specific to Overlook,** **15,000**  
pounds of blue wrap are tossed each year.

**Tami Ochs**, RN, Overlook Inpatient Behavioral Health, saw an opportunity to reduce this statistic. Drawing from her interest in sewing, she created a zero-waste pattern for large and small patient tote bags made from the hospital’s sterile blue wrap waste.



Each bag requires roughly 25 minutes to machine-stitch.

After creating several sample totes, Ochs presented the bags to Overlook’s Green Team, which immediately supported the idea. Now, community groups and volunteers help prepare and produce the bags.

“Tami brings the bags to me, I attach an Overlook label, and we distribute the totes to hospital patients—particularly those who arrive due to an emergency situation, without a bag for their belongings. In the past, we gave these patients plastic tote bags,” Bonassisa explains.

**Overlook estimates that using these replacement totes will keep 100,000 plastic bags out of the dumpster annually and save the hospital**

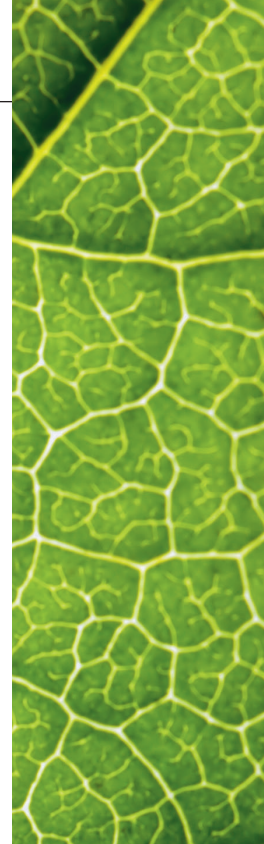
**\$30,000**  
**a year on patient bags.**

In addition, the hospital sells the totes for \$2.99 in the gift shop. This revenue could lead to outsourcing the blue wrap tote project and possibly expanding the program throughout the Atlantic Health System to include more products. For example, the Green Team is investigating ways to repurpose blue wrap into sleeping bags and ponchos for local homeless populations.

Moving outside hospital walls, Overlook promotes sustainability within the community it serves.

In 2013, the hospital’s Food and Nutrition Department installed 10 beehives on the Medical Center’s roof, with additional hives added to a neighborhood arboretum.

Today, the hives anchor a full-fledged program called “Bee Healthy.” The honey and beeswax are used in the hospital kitchen as well as for lip balms and lotions sold in the gift shop. Beyond that, Bee Healthy has grown into an educational program for children in local schools and the hospital’s daycare center. “We bring in a beekeeper to speak about how we need to help the bees and how the bees help us by producing



healthy food,” Bonassisa explains. “It’s a great example of how a small idea can grow into a powerful way to teach our children about sustainability.”

## STIRRING UP SUSTAINABILITY

HCA Healthcare, based in Nashville, Tennessee, is always scouting out new ways to green healthcare practices. Its corporate-approved sustainability plan includes four task forces that identify and research environmental issues with company-wide application. They are:

► **Waste Stream**—chaired by **Anna Ward**,

Director of Sustainability

► **Energy & Water**—chaired by **Brian Weldy**, VP of Engineering

► **Construction & Major Renovation**—chaired by **Bryan Seely**, AVP of Design and Construction

► **Environmentally Preferable Purchasing**—chaired by **Domini Pelkey**, Director of Supply Expense Management



Ward is especially proud that the success of the sustainability program includes working with HCA Healthcare colleagues across the company and supporting such efforts within their communities. For instance, sustainability coordinators are appointed at all hospitals. They are responsible for the implementation of sustainability initiatives at the facility level and have introduced programs such as xeriscaping (landscaping that survives on little-to-no irrigation) for water conservation. Grassroots efforts can also be seen in HCA Healthcare’s warehouse locations.

For example, in the Richmond, Virginia, Consolidated Service Center (CSC), “We switched to compostable bamboo coffee stir sticks in our breakroom,” recalls **Steve Vecchione**, CFO, Richmond CSC HealthTrust Supply Chain.



It was a move that was ignited by action from **Sydney Rob**, now Human Resources Coordinator at Henrico Doctors’ Hospital, who’s always been passionate about sustainability. When the coffee stirrers went over well with employees, Rob decided to expand sustainable efforts with a composting program. She called in a local composting collector to conduct educational sessions for the staff and then set up a three-bin system in the breakroom: one bin for regular garbage, one for recyclables and



one for compostables. Next, she filled the breakroom with compostable products, including compostable plates, cups and cutlery. To support her program, Rob and the Employee Advisory Group took a team approach, and developed posters that offered composting instructions and encouraged colleagues to participate.

“Sydney kept a close watch over the bins, including going through them at the end of the day to make sure no non-compostable items landed in the compostable bins,” Vecchione says. “Her dedication inspired us all to get in the game.”

Ward adds that the strength of these programs can be attributed to both the passion the colleagues bring, as well as strong leadership support at the local and corporate levels. Rob’s efforts were brought to corporate’s attention by the CSC leadership.

Rob’s passion for the effort continues even after taking a role at another of the organization’s facilities. And she has become a member of the Waste Stream Task Force, which Ward chairs. “Sydney has been a valued contributor to sustainability both in her local community and in efforts that impact our whole company,” Ward adds.

Vecchione reflects on other efforts being made at the CSC: In purchasing and accounts payable, the department focused on reducing its paper consumption. Step one was to identify documents that could be saved as PDFs rather than printed in hard copy format.

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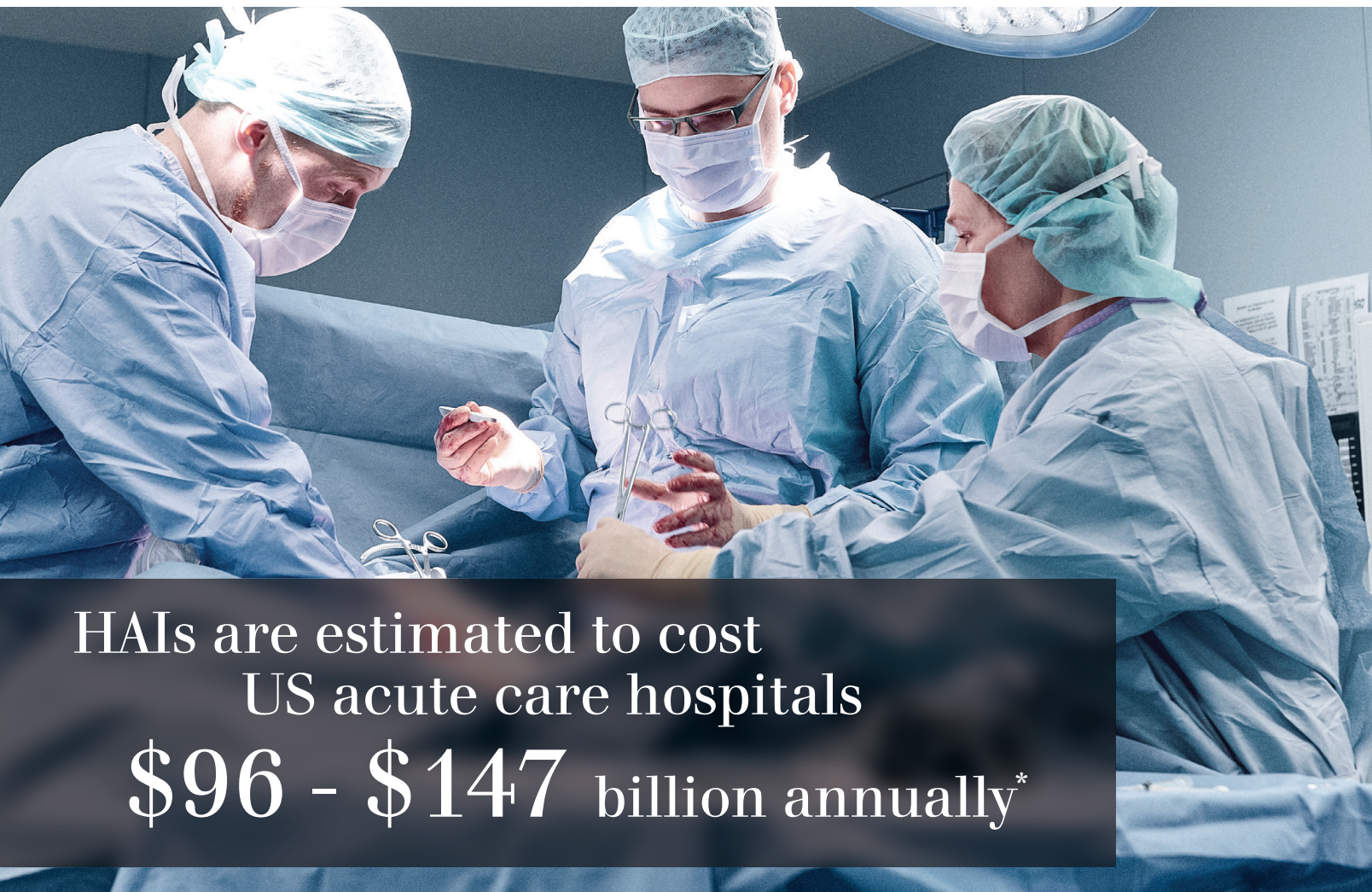
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**9,600**

**pounds per year.**

*Continued on page 52*





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Continued from page 50

With fewer printouts, the department did not need as many printers. Today the department maintains only five printers, down from 40, and all are equipped with recycled ink cartridges.

The warehouse team focused on sustainably handling cardboard boxes. Instead of putting boxes in the trash compactor, they began breaking down every cardboard box that passes through the warehouse and putting everything in a large corrugated container for recycling.

“At first, there was concern that breaking down so many boxes would take too much time and decrease productivity,” Vecchione says. “It turns out that recycling increased productivity. It’s quicker for the team to break down cardboard boxes than stand in long lines to toss boxes in the compactor.”

Whether it’s keeping beehives, implementing composting bins or repurposing blue wrap, today’s leading hospitals and health systems are consistently proving that even small environmentally conscious changes can equal big wins. **HT**

In the first 6 months of 2019,  
HCA Healthcare’s warehouse  
in Richmond recycled  
**19,745**  
pounds—almost 10 tons  
of cardboard.  
It’s on track to recycle  
**34,000**  
pounds of cardboard by year’s end.

“Recycling increased productivity. It’s quicker for the team to break down cardboard boxes than stand in long lines to [use] the compactor.”

—Steve Vecchione







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want it to be.

# MINDSET



## changing...

Strategies for a more productive, positive life



DALE SMITH THOMAS HAS TRAVELED THE WORLD AS A MOTIVATIONAL SPEAKER WITH A SIMPLE GOAL: to use HOPE (which she defines as “Helping Other People Excel”) to inspire change. As a speaker at the HealthTrust University Conference this year, Thomas spoke about the value of infusing hope into everyday habits, both personally and professionally, to help people maximize their potential. Here is her advice for translating optimism into achievement, in healthcare and beyond.

### USING POSITIVITY AS A TOOL FOR SUCCESS

A growing body of evidence over the last two decades highlights how a positive and engaged brain is the greatest competitive advantage in our modern economy, Thomas says. According to a 2016 article in the *Journal of Medical Practice*, small shifts in ways people communicate translate into a more robust bottom line, including 31% higher productivity and 25% greater performance ratings. Meanwhile, research also shows physicians who feel positive and optimistic arrive at a correct diagnosis 19% faster than peers who report feeling neutral.

“Optimism isn’t just a feel-good emotion; scientific data backs it up,” she says. “In healthcare, employees are faced with so many different things coming at them from various directions, and there’s a lot beyond their control.”

Small shifts in ways people communicate translate into a more robust bottom line, including

**31%**  
higher productivity and

**25%**  
greater performance ratings.



DALE SMITH THOMAS motivates audiences by using HOPE (Helping Other People Excel).

### KEY TIPS FOR LEVERAGING YOUR MINDSET

Thomas shared her insights with 2019 HealthTrust University Conference attendees in August during her presentation *Mind Management: Strategies for a More Productive Life*. Here are some of the key tips she provided to HealthTrust audience members to help encourage a changing mindset:

- **Pay attention to right now.** So many people drive to work and don’t remember how they got there, because they’re not in the present moment. Yet, their power is in the present moment.
- **Begin with the end in mind.** Decide where you want to be, like setting the GPS in your car. If you don’t know where you want to go, you can’t get there.
- **Change your input to change your output.** Spend time every day reading positive material or listening to a podcast that puts your mindset where you want it to be. If you take 30 minutes a day to make your life professionally or personally better, you will have spent 28, eight-hour days a year on that improvement.
- **Use words that prod positivity.** Change your mindset by changing the language you use to frame your life. I hear so many people say how overwhelmed they are. To me, that feels chaotic. Instead say, ‘I’m not overwhelmed, I’m in demand.’
- **Avoid negative people.** You have to control who’s in your sphere.

Thomas recognizes that in healthcare, as in life, there are some things beyond your control. But the way you approach a situation can make all the difference. **HT**

“I want to give you the power to say to yourself, ‘The only thing I can change right now is my mindset.’ The glass is refillable—you decide.”

# WITHIN YOUR POWER

## Proactive ways to reduce energy costs, right at the source

Hospital facilities managers and directors of operations are acutely aware that conserving energy is essential to reducing energy spend. While it's true that managing energy usage is at the center of controlling costs, going straight to the source can amount to significant savings.

### GETTING THE BEST PRICE FOR ENERGY

Discovering new ways to source energy should be part of your overall energy savings strategy, according to **Bill Miller**, Director of Strategic Account Integration for inSight Advisory – Energy at HealthTrust. The inSight Advisory program can help members with the analysis needed to make smarter energy choices. Miller offers the following considerations.



- 1** Keep in mind that volatility in energy markets could work to a facility's advantage, as energy providers vie to attract dependable institutional customers. Investigate whether an energy procurement company might be able to find new energy partners (including renewable energy sources) that can deliver energy at a lower rate.
- 2** Negotiate rates with one or more new providers based on actual forward pricing instead of flat, across-the-board rates from a regulated utility. This could yield significant savings. inSight Advisory – Energy can act as a major partner when negotiating with energy providers.







## THE POWER OF PPAs

Facilities can enter into a PPA for power generated onsite, or from a remote generation source. “Typically, an energy supplier approaches a hospital with an offer of energy at a predetermined rate for a set period of years,” Miller explains. “The supplier benefits by receiving predictable cash flow over the term of the contract, which can be 5, 10, 15 or 20 years in duration, and apply that income to defray the cost of building the energy generation infrastructure.”

Miller adds that the cost goes down as the length of the contract goes up. The hospital is assured of paying the guaranteed price with no performance problems—any lapses in service from the contracted supplier are supplemented by the existing utility grid or other systems.

“Whether it’s solar, wind, microgrids or fuel cells—you can purchase the output through a PPA,” says Miller. Healthcare groups interested in pursuing green technologies may find this to be an easier way to make that transition, because the energy supplier owns the infrastructure. For example, the supplier could install solar onsite or bring in electricity generated at a wind farm. Depending on state or federal policies, tax incentives might further drive costs down.

Miller explains that most PPAs share common features, such as no upfront costs to get in—and a hefty termination fee if the facility wants to end the relationship before the term is over. The inSight Advisory – Energy program can help HealthTrust members evaluate such proposals by looking over the contract and giving an unbiased recommendation. “There is no ‘one-size-fits-all’ agreement,” Miller says. **HT**

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**3** Engage a partner that can help you forecast energy prices—it’s essential to ensuring hospitals get the best deals possible. HealthTrust can advise members about price predictions, including when to enter into new agreements and whether to extend them.

**4** Consider entering into a power purchasing agreement (PPA). A PPA is an arrangement where a facility agrees to purchase energy from a third-party developer that owns and operates a generation system. PPAs can give facilities options for purchasing renewable energy.

**FOR MORE INFORMATION** on how inSight Advisory – Energy can help you explore power sourcing options, contact Bill Miller at [bill.miller@healthtrustpg.com](mailto:bill.miller@healthtrustpg.com)

NAS rates were  
**five times  
higher**  
in 2013 than  
in 2000.

2013

2000

# SAVING GRACE

## Franciscan Health's Grace Project provides guilt-free support for moms who deliver babies with neonatal abstinence syndrome

In 2015, neonatologist **Paul Winchester**, M.D., of Franciscan Health Indianapolis, gave voice to an alarming trend he was witnessing in the hospital's neonatal intensive care unit. In prior years, he might see one infant a year needing treatment for neonatal abstinence syndrome (NAS). But a handful of years later, the phenomenon's frequency quickly skyrocketed, with at least one baby a day in the NICU suffering from NAS.

Winchester's observations mirrored national statistics. As the opioid epidemic grew in the U.S., the number of babies born addicted also increased. NAS rates were five times higher in 2013 than in 2000. And according to the Centers for Disease Control and Prevention, more than 70,000 people died in 2017 from drug overdoses, with 68% involving a prescription or illicit opioid.

During  
the program's  
lifespan to date,  
more than  
**\$210,000**  
has been raised.





The Grace Project team from left to right: Erin Neu, RN, BSN; Traci Schank, MSW, LCSW; and Greg Williamson, Executive Director of the Franciscan Health Foundation. The Grace Project assists moms in need with supplies and financial support.



“More than 400 colleagues have made at least one gift to the Grace Project, making it the most popular project employees can donate to.”

—Greg Williamson

Recognizing the gap in caring for babies with NAS as well as their mothers—who might continue to use drugs and place their infants at risk—Franciscan Health birthed the Grace Project at both its Indianapolis and Central Indiana campuses four years ago. The project, which has since assisted more than 60 moms, supports women before and after delivery by paying for a number of needs while they work to overcome their addictions and make a better life for their babies and themselves.

Through a partnership with clinical leaders, social services and donations to the Franciscan Health Foundation, the Grace Project has supported everything from addiction treatment programs to housing costs, job training, utilities, baby supplies, transportation and food for these struggling but motivated moms. Nominated for a 2019 HealthTrust Social Stewardship Award, the initiative also supports interventions such as medication-assisted treatment from qualified physicians.

Funding picks up wherever a mother’s insurance coverage leaves off, says **Erin Neu**, RN, BSN, an OB Nurse Navigator at Franciscan Health Indianapolis. “As I worked with patients with substance use disorders on the OB floor, I found there were often so many obstacles in the way of overcoming addiction,” she says. “These moms had a huge sense of being judged and a huge amount of guilt, so asking for help was really hard. We realized this is a big issue, and we need to help these moms get into treatment and feel supported during their journeys to recovery.”

### NO CAP ON SUPPORT

After **Greg Williamson** won approval for the Grace Project’s launch, the Executive Director of the Franciscan Health Foundation appreciated how quickly donations of all sizes mounted. A notable proportion of Franciscan Health employees even earmark biweekly donations for the project directly from their paychecks. Community fundraisers have also been successful, such as the “Party for a Purpose” event incorporating casino games, food stations and a silent auction.

“More than 400 colleagues have made at least one gift to the Grace Project, making it the most popular project employees can donate to,” says Williamson. During the program’s lifespan to date, more than \$210,000 has been raised.



**LEARN MORE** about the Grace Project and the lives positively impacted by its support at [franciscanhealthfoundation.org/program-type/women-children-programs](https://franciscanhealthfoundation.org/program-type/women-children-programs)

Matthew Allen

“My philosophy is, we can’t be a source of hope or inspiration and then only help financially up to a certain point,” explains Williamson, adding that there’s no cap on funds available to each mother, even if she needs expensive inpatient or residential treatment for her addiction. “I’m so proud that the Grace Project invests in helping these moms complete their needed treatment.”

### SUCCESS STORIES MOUNT

The investment is clearly paying off. Grace Project coordinators point to many success stories, including a former high school and collegiate athlete who struggled with opioid addiction for years after a sports injury. Later becoming a heroin addict and seeking assistance while 28 weeks pregnant, she received approximately \$7,000-worth of help from the Grace Project that went toward residential and medication-assisted treatment, rent, utilities, baby supplies, mentorship training and other needs.

“It was definitely money well spent,” Neu says. “She’s doing fabulous now and helping other moms.”

Franciscan Health Indianapolis social worker **Traci Schank**, MSW, LCSW, who helps coordinate services for the program, says the Grace Project’s impact will ripple for years to come by chipping away at the opioid epidemic and increasing reunification rates between mothers and babies.

“Moms are most motivated during pregnancy and after birth to change something like this,” Schank explains. “We want to offer them a guilt-free, nonjudgmental place to receive help in getting clean and staying clean. We feel the Grace Project offers moms hope they didn’t have before.” **HT**





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**GETINGE** 

# A proactive approach to SUPPLIER DIVERSITY

HOSPITALS TODAY WANT THEIR SUPPLY NETWORK TO REFLECT THE SAME LEVEL OF DIVERSITY AS THEIR COMMUNITY. That's where HealthTrust's Supplier Diversity Program comes in. Designed to not only encourage diverse suppliers—particularly those owned by minority, woman, veteran and service-disabled veteran enterprises (Diverse Business Entities, or DBEs)—to contract with HealthTrust, the program staff also facilitates relationships with its member hospitals.

## HOSPITALS BENEFIT FROM CONTRACTING WITH DIVERSE SUPPLIERS

- ▶ Expansion of external partnerships—often nontraditional—in the community
- ▶ Local job creation and other community benefits
- ▶ Supplier roster that mirrors the patient and community populations
- ▶ Better understanding of supply chain sourcing process and sources
- ▶ Easier compliance with government and grant contracting requirements around supplier diversity

Source: Health Research & Educational Trust

**In the past 20 years, HealthTrust's Supplier Diversity Program has grown from a goal of \$23.4 million in diversity spend with 18 contracts, to a goal that is on track to exceed \$320 million in 2020, with more than 160 DBEs.**

**Between 2014 and 2018 alone, member spend on diverse contracts increased by 50%.**

"We want to create opportunities for diverse suppliers to provide their products or unique services to the HealthTrust membership," says **Joey Dickson**, Chief Diversity Officer and Assistant Vice President for Purchased Services Strategic Sourcing.

"Supplier diversity enhances the supply chain by bringing greater innovation and by driving greater value through cost reductions, competitive contract terms and conditions, and improved service," says

**Timothy Martin**, Manager, Contracting, Laboratory & Supplier Diversity for CHRISTUS Health. The CHRISTUS supplier diversity program "aligns with our commitment to having diverse leadership and equity of care for the communities that we serve," he adds. "Ultimately, supplier diversity demonstrates consistency with CHRISTUS Health's core values."



*Continued on page 64*

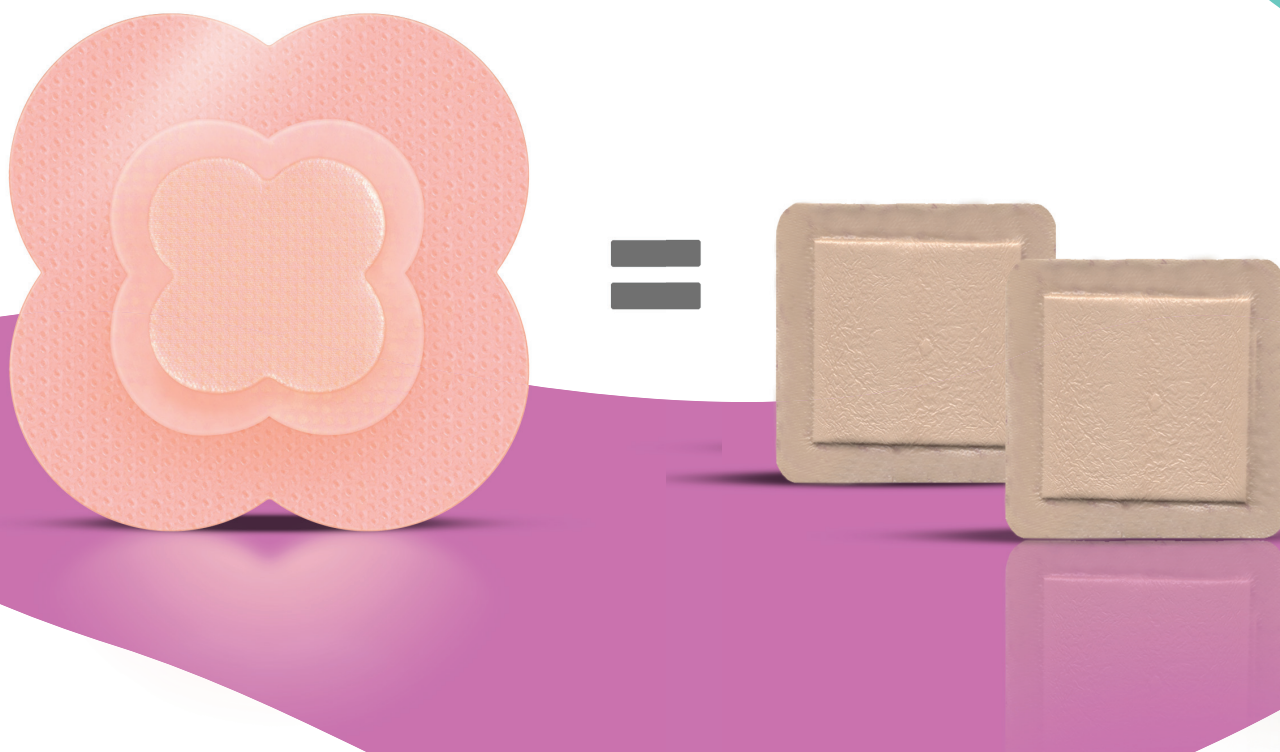


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ALEE3-12929-0919

References: 1. Joy H et al. A collaborative project to enhance efficiency through dressing change practice. Journal of Wound Care. Vol 24. No 7. July 2015 P3-4. 2. Data on File Report GMCA-DOF/08 –April 2016, A. Rossington. Product Performance of Next Generation ALLEVYN LIFE.

The supplier diversity program at CHRISTUS Health recognizes that sourcing products and services from previously underutilized suppliers helps to sustain and progressively transform a company's supply chain, thus quantitatively reflecting the demographics of the community in which it operates by recording transactions with diverse suppliers.

– Healthcare Group Purchasing Initiative.  
Supplier Diversity Business Practices in  
the Healthcare Industry, 2017

The supplier diversity program at CHRISTUS Health provided part of the impetus for HealthTrust's newest initiative: The Supplier Diversity Council. Composed of 11 integrated delivery systems, all with their own robust supplier diversity initiatives, the Council is designed to identify best practices that can be disseminated throughout HealthTrust's membership, communicate about sourcing and savings opportunities with DBEs, and better align HealthTrust's supplier diversity goals with those of the members, says Dickson. Ultimately, he says, "We believe this initiative will increase the use of diverse suppliers across our members' supply chains."

"It's a great platform that brings together thought leaders to collaborate and share best practices," says Martin. "It has the potential to accomplish a great deal. By combining all the input from representing member organizations, we are creating a toolkit other health systems can use to start a supplier diversity program."

### TAKING A PROACTIVE APPROACH

For many years, HealthTrust relied on diverse suppliers to approach the organization to request consideration. "But now, with the Council and the support of senior leadership we're being more proactive," says **Janet McCain**, Director of Business Diversity. That includes developing a closer working relationship with the national as well as regional offices of the major certifying agencies and other impactful organizations with initiatives toward supplier diversity.







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**HealthTrust Contract #5513**

HealthTrust also updated its contract life cycle management system to alert the Diversity team when each contract category kicks off. It recently partnered with a third-party data collection company to analyze member data for diverse supplier spend and identify suppliers that may meet the criteria for diversity but may not be classified as such in the system.

Additionally, for the past two years, HealthTrust has hosted an annual Supplier Diversity Symposium in which vendors spend time together onsite in Nashville, Tennessee. "It's an opportunity

for us to meet, develop relationships and build rapport with them," says Dickson. The symposium is also a time to educate, collaborate and update suppliers about changes to the program and potential opportunities with new member hospitals."

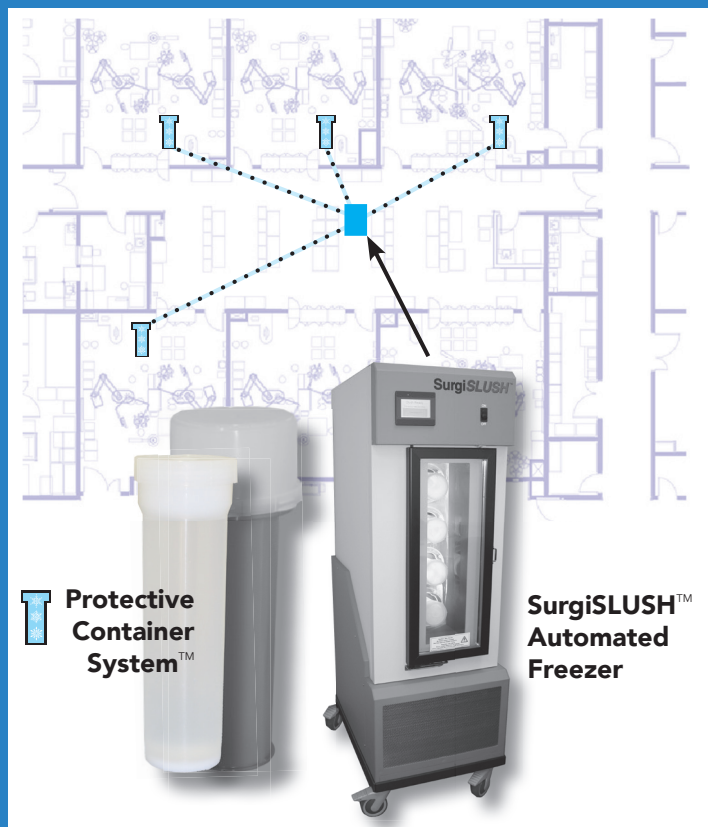
### WHAT MEMBERS CAN DO TO PROMOTE & GROW SUPPLIER DIVERSITY

The first thing members can do is review the current portfolio of diverse suppliers on contract and make sure they are compliant with all sole source awards. Next, consider diverse suppliers with dual, multi, diversity or optional source status when the value the diverse supplier brings is more favorable than the competitors on contract.

When approached by prospective suppliers, members should direct them to register on the HealthTrust website at [healthtrustpg.com](http://healthtrustpg.com). **HT**

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**TO LEARN MORE** about HealthTrust's diverse supplier contracts, contact Janet McCain at [janet.mccain@healthtrustpg.com](mailto:janet.mccain@healthtrustpg.com)

*Correction to page 27 of the Q3 edition: Nicholas Theodore is the inventor of the ExcelsiusGPS.*



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<sup>^</sup>Visit [clinicaltrials.gov/ct2/show/NCT02594501](http://clinicaltrials.gov/ct2/show/NCT02594501) to learn more. 1. Levine G, Bates E, Bittl J, et al. 2016 ACC/AHA Guideline Focused Update on Duration of Dual Antiplatelet Therapy in Patients with Coronary Artery Disease. *Circulation*. 2016;134(10):e123-55. 2. Cutlip D, Garrat K, Novack V, et al. 9-Month Clinical and Angiographic Outcomes of the COBRA Polyene-F NanoCoated Coronary Stent System. *JACC Cardiovasc Interv*. 2017;10(2):160-1672.

Indications for Use: The COBRA PzF NanoCoated Coronary Stent System is indicated for improving coronary luminal diameter in patients, including patients with diabetes mellitus, with symptomatic ischemic heart disease due to de novo lesions in native coronary arteries. The COBRA PzF NanoCoated stent is intended for use in patients eligible for percutaneous transluminal coronary angioplasty (PTCA) with reference vessel diameter (RVD) of 2.5-4.0mm and lesion length of ≤24mm.

Visit [www.celonova.com/cobra-pzf-nanocoated-stent/precautions](http://www.celonova.com/cobra-pzf-nanocoated-stent/precautions) for IMPORTANT SAFETY INFORMATION.

Contraindications: The COBRA PzF NanoCoated Coronary Stent System is contraindicated for use in patients with known sensitivity to L605 cobalt-chromium alloy (including its major elemental constituents cobalt, chromium, tungsten, and/or nickel). Contraindication to coronary artery stenting: Patients with lesions that may prevent complete inflation of an angioplasty balloon, proper placement of the delivery device or stent deployment. Patients are unable to receive recommended anti-platelet and/or anti-coagulant therapy. Known severe reaction to contrast agents that cannot be adequately pre-medicated prior to the COBRA PzF NanoCoated Coronary Stent System placement procedure.

Warnings/Precautions: Use of this device carries the associated risks of stent thrombosis, vascular complications, and bleeding events. Judicious patient selection and administration of appropriate anticoagulant and antiplatelet therapy are necessary to reduce these risks. Compared to use within the specified Indications for Use, the use of COBRA PzF NanoCoated stents in patients and lesions outside the labeled indications, including more tortuous anatomy, may have an increased risk of adverse events, including stent thrombosis, stent embolization, MI, or death.

See the Instructions for Use for complete information regarding the procedure, indications for use, contraindications, warnings, precautions, and potential adverse events. Rx Only  
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APM 0314 MAY 2019 Rev. A1





# GREENER PURCHASING with MindClick

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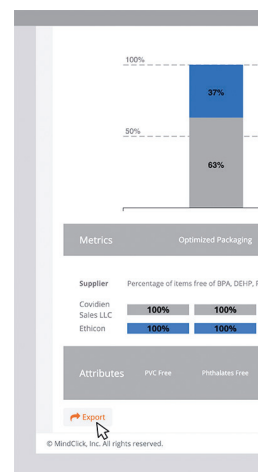
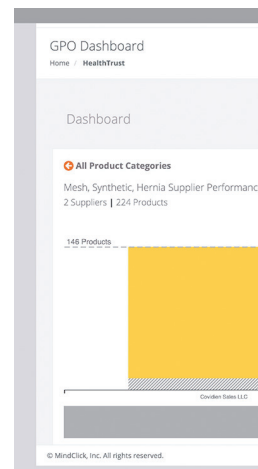
“It’s really about much more than savings,” says **Zoë Beck**, Sustainability Manager at HealthTrust.

“It’s about doing the right thing for patients, hospital staff, the surrounding community and, ultimately, the environment.”

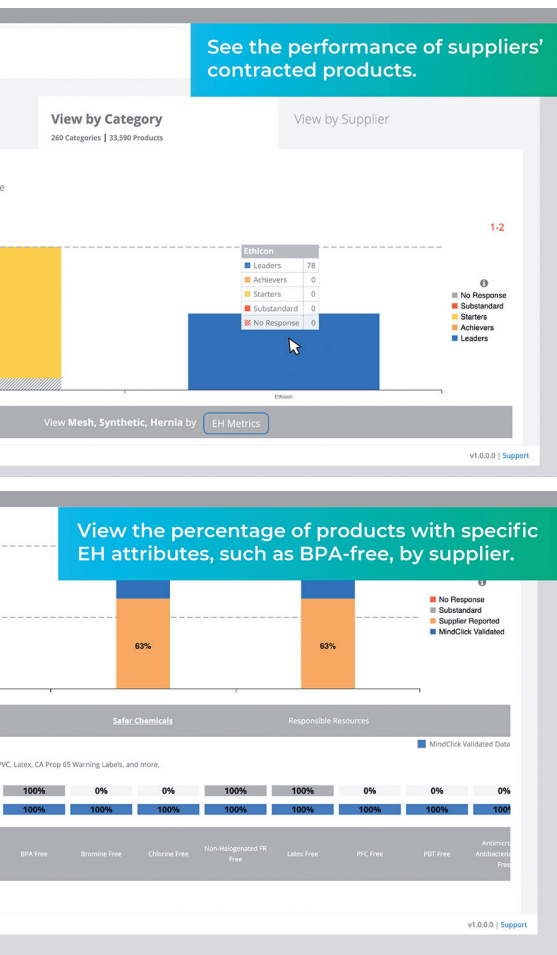


Through MindClick, members can:

- ▶ Quickly find products free of chemicals of concern
- ▶ See how a supplier’s packaging choices are reducing waste
- ▶ Learn which suppliers lead the way in environmental responsibility







## THE NEED FOR GREEN

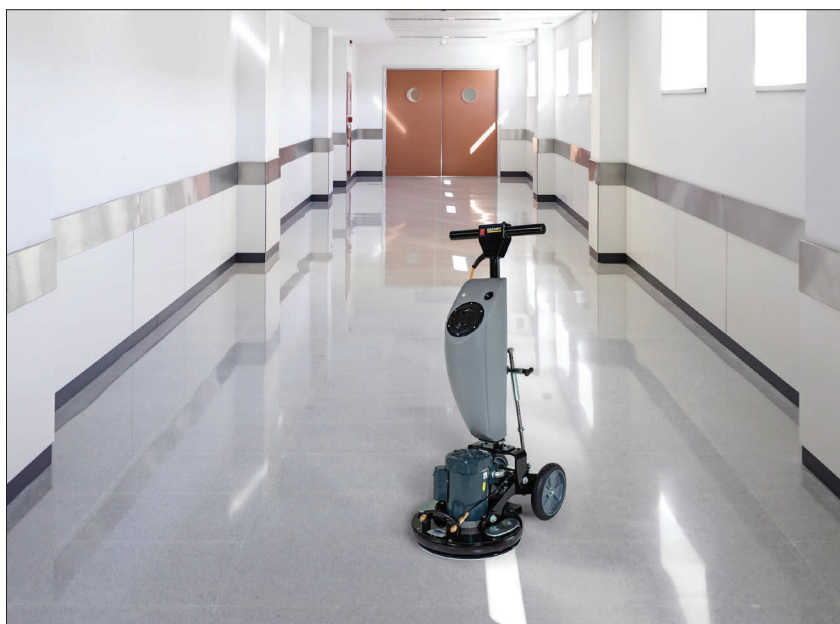
While a healthcare facility is supposed to be a place of healing and restoration, it also contributes to chemical exposure and other environmental impacts through the processes of cleaning and disinfecting, through emissions and in the disposal of waste. This is why the healthcare sector is increasingly concerned with sustainability issues.

“HealthTrust’s goal has always been to support the sustainability initiatives of our members by effectively incorporating the principles of environmentally preferable purchasing (EPP) into the contracting process,” says **Cathy Florek**, Vice President of HealthTrust’s Supply Chain Board & GPO Sourcing Operations.



Hospitals and care systems that pursue sustainability initiatives find benefits in multiple areas. Their efforts contribute to a healthier environment, improve the organization’s public perception and can help their local communities. Environmental sustainability is also good business, as it helps lower operational costs and allows hospitals to direct more resources to patient care.

– Hospitals in Pursuit of Excellence. Environmental Sustainability in Hospitals: The Value of Efficiency, 2014



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EPP involves actively contracting for and purchasing products or services whose environmental impacts have been considered and found to be less damaging to the environment and human health when compared to market competitors.

Florek adds, “For years, however, a lack of agreed-upon standards within the healthcare industry made capturing sustainability information about products extremely difficult. HealthTrust has long sought a solution to provide members with relevant sustainability attributes about the products it has on contract so they can make informed purchasing decisions.”

### A SOFTWARE SOLUTION

Enter new software partner, MindClick. This environmental health product intelligence solution gathers decades of environmental health information at the product level from industry suppliers and turns it into actionable information members can use to help make sustainable purchasing decisions.

Beck explains, “MindClick rates how a product fares in terms of environmental health attributes compared to other

products in its category and benchmarks how suppliers compare to one another.” This will assist members and facility “green teams” in making better-informed purchasing decisions and in tracking their progress toward meeting sustainability goals.

“Supplier partners are a critical stakeholder in EPP,” Florek adds. “Their participation with MindClick will assist HealthTrust members in knowing more about their products and their company’s commitment to corporate social responsibility. EPP will be an important factor considered in contract award decisions made by the HealthTrust advisory boards.”

Customizing the tool to many of HealthTrust’s contracted suppliers is under way. Plans are to roll out MindClick in late 2019/early 2020. Watch *The Response* newsletter or the Sustainability section of the HealthTrust Member Portal for information on upcoming webinars to receive training on how to use the tool. **HT**

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## HealthTrust members from 9 IDNs meet for Wound Care Summit

HealthTrust's Clinical Services team, under the direction of Chief Medical Officer **John Young, M.D., MBA**, hosted a Wound Management Collaborative Summit in mid-September.

Attendees included 45 representatives from Beaumont Health, CHRISTUS Health, Community Health Systems, HCA Healthcare,

Hospital Sisters Health System, Kindred Healthcare, LifePoint Health, Scripps and WellSpan Health.

Similar to the collaborative pain management and AMI summits HealthTrust has hosted in recent years, this highly interactive, two-day workshop involved teams of three to five people from different institutions working together. Participants shared the current states of their wound management programs, identified key challenges and expressed what they hoped to learn as a result of participating.

The goal of the collaborative summit was to serve as a platform for participants to review literature and current practices in managing wound care patients; interact with subject matter experts; and, through breakouts and brainstorming sessions, share knowledge and experiences to establish the "ideal" wound care practice. With all of this knowledge, IDN-specific teams then worked to develop customized action plans to take home and drive progress in addressing care variation, rising costs and managing patients in need of wound care across their health system.

As a result of collaboration, member attendees now have a network of peers to engage with for continued interaction and learning. The group will reconvene by videoconference in December to monitor progress. The Q1 edition of *The Source* will feature attendee interviews as well as updates on their action plans.

Participating HealthTrust Physician Advisors included wound care expert **Caroline Fife, M.D.**; plastic surgeons **Salvatore Pacella, M.D.**, and **Aron Wahrman, M.D.**; and podiatrists **Bert Altmanshofer, DPM**, and **Dean Vayser, DPM**. Industry expert **Kathleen Schaum** shared her knowledge of wound care reimbursement and guidelines from the Centers for Medicare & Medicaid Services. **HT**

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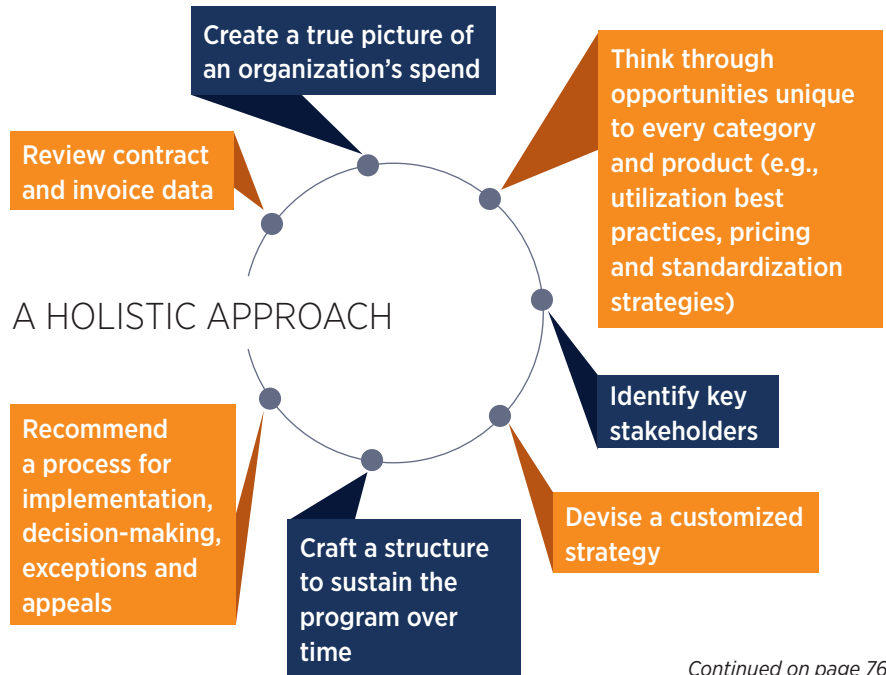
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## Worth a look: HealthTrust's approach to value analysis

Large health systems with multiple hospitals often have different contracts for the same products and services across the IDN. Conflicting points of view on how to best manage these products and services can make it difficult to establish purchasing and contracting strategies. And, getting clinicians engaged in the process can also be a hurdle. The results are missed opportunities for value and savings.

inSight Advisory – Supply Chain is committed to helping HealthTrust members create and sustain value-analysis programs that engage key stakeholders and optimize the supply chain in order to facilitate strong patient and financial outcomes.



*Continued on page 76*

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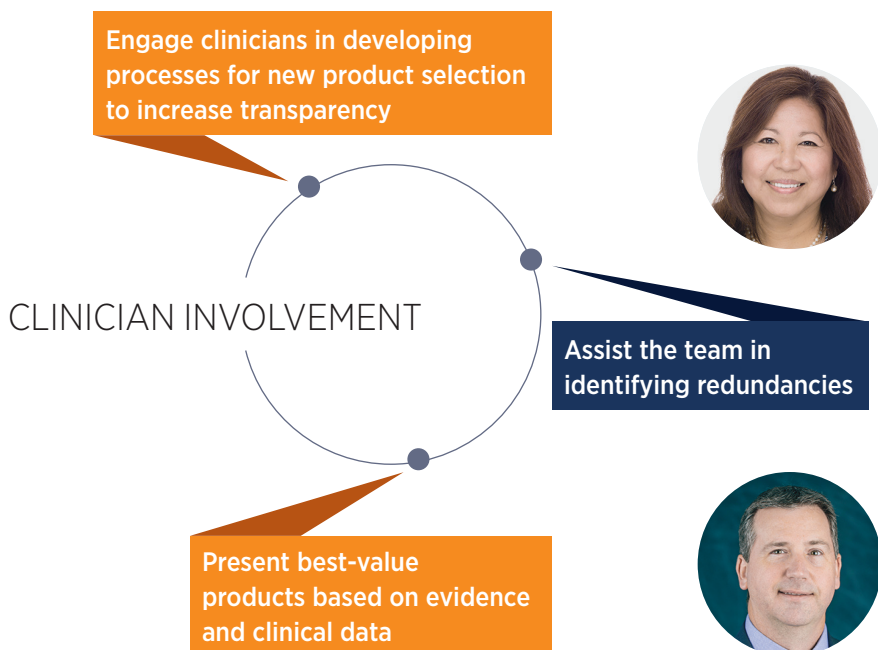
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Continued from page 74



## THE RESULTS?

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- 2 Standardized products and supplies
- 3 Reduced costs while improving clinical outcomes



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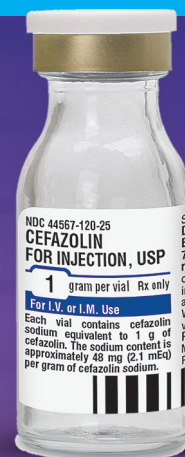
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2019 HealthTrust Supplier Excellence Award - Pharmacy

Please see full Prescribing Information, including Warnings and Precautions, and Important Safety Information for this product at the WGCC website [wgccrx.com](http://wgccrx.com)

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# Symphony<sup>®</sup>



# Symphony MAX<sup>®</sup>



Symphony and Symphony MAX are rapid deployment, high volume, high flow-rate 5 or 6 french centesis kits that include the most commonly used components for these procedures.

## Symphony and Symphony MAX Procedure Kits Include:

- Centesis Catheter 5F or 6F
- 10.5mL Clear Chloraprep
- Safety Scalpel
- 10mL Syringe
- 60mL Syringe
- 18G Safety Needle
- 25G Safety Needle
- (3) 10mL Specimen Tubes
- Safety Needle Holder
- (3) Gauze 4 x 4
- 3 Way Stopcock
- Syringe Cap
- Fenestrated Drape
- Blue OR Towel
- Skin Marker

## Evolution<sup>®</sup> Evacuated Suction Bottle

The Evolution line of evacuated suction bottles was born from necessity as an alternative to glass bottles and backorders. We've been there for you since the beginning.



- Available in 1,000 ml with or without sterile drain line.
- Consistently draws 1,000 ml or more every time.
- Consistent Quality. Consistent Availability.

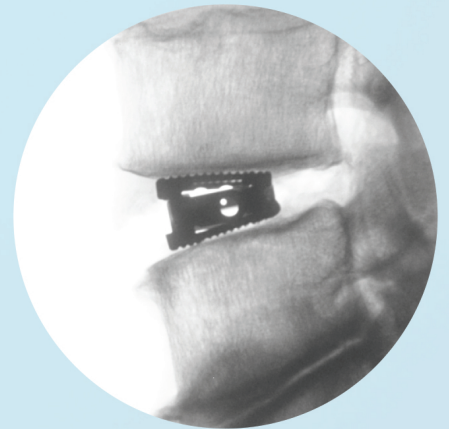
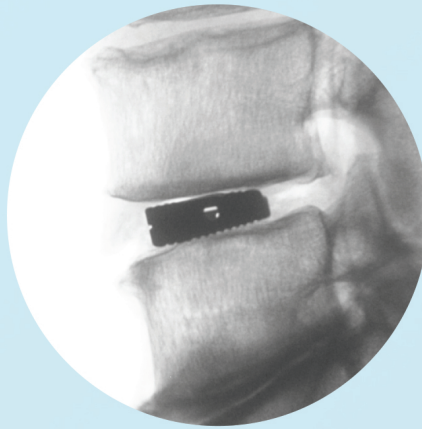
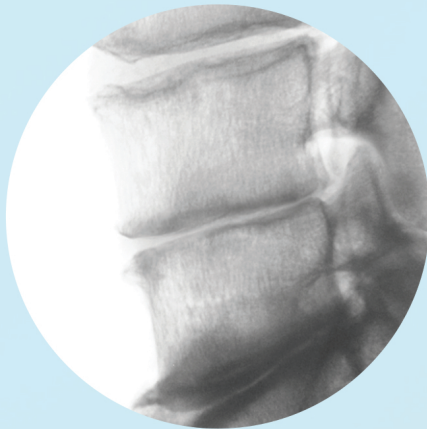
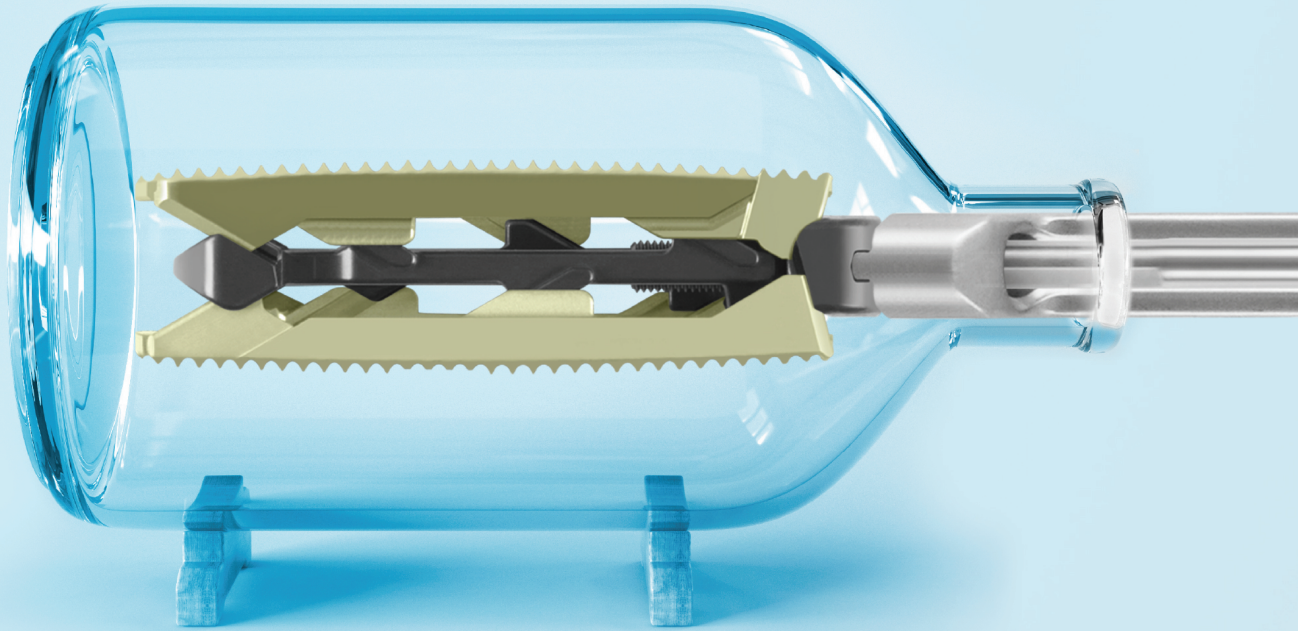
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