

# The Future of Heart, Vascular & Stroke Care



**Beacon Memorial Hospital**



**Beacon Granger Hospital**



**Beacon Elkhart General Hospital**



**Beacon Community Hospital of Bremen**



# Dear colleagues,

This is the third, and final, report for the Beacon Memorial Hospital Heart, Vascular and Stroke Collaborative Care Program. As of mid-2019, we successfully transitioned the program to span the entire Beacon organization.

Our collective program can now recognize the unique challenges that impact the system as a whole and develop strategies and programs to address each one. We strive to develop patient care that is uniform across the system and outcomes-based to ensure the highest level of care. This is not easy. However, you will see significant improvements in a number of key quality initiatives.

We concluded the Memorial program with many significant achievements. Among them, we are especially proud of new certifications and recognitions that set us apart as unique to the entire state of Indiana.

**94%** of our performance metrics showed positive trending in the last two years.

Cost savings of **\$700,000** was realized to Beacon Memorial Hospital for 2018-2019.

Physician procurement for the entire system is a top priority moving forward. Patient satisfaction and service utilization in our programs is high.

**We are happy to celebrate our expanded success story with you.**

Sincerely,



**Ronald Nelson, M.D.**



**Larry Tracy**

## **"I actually died... twice."**

This is how Brad begins his story, but – fortunately – it didn't end there. "I wasn't sick. I didn't see it coming."

Brad loves adventure. He served his country in the Marine Corps. He's backpacked all 50 states and Europe and ridden his motorcycle 1300 miles to Tennessee. He flew a helicopter for Lifeline Methodist Hospital in Indianapolis and worked as a bouncer at a club in Indy. He has bred show horses, competing and winning at the national level. He's a husband and a father of two children. But it was eight minutes on August 9, 2019 that had the most profound impact on his life.

He woke that day the same as any other, until the chest pain hit – and continued to get worse. His wife drove him to Beacon Community Hospital of Bremen, eight minutes from their home. Brad suffered a massive heart attack, and the medical team at Bremen brought him back from death – twice. Once he was stabilized, they rushed him to Beacon Memorial Hospital in South Bend, where Dr. Katsaropoulos performed the first of two surgeries to place a total of six stents into two of his arteries.

"Later they told me if I had tried to drive the 42 minutes from my home to South Bend, I wouldn't have made it," Brad explains. Thankfully, he is here today, and he's taking life as it comes. He credits the team at Bremen for his second chance at life. "I feel lucky. And very grateful," he says. "Bremen's a small community. Everybody knows each other. It's like a big family. My cousin is actually the head nurse who helped save my life that day. Because of Beacon in Bremen... 8 minutes away... I'm alive."



**"Because of Beacon in Bremen...  
8 minutes away... I'm alive."**

**- Brad**

## **The Future of Heart, Vascular, & Stroke Care**

As Beacon Health System continues to evolve, our goal is and always will be to enhance the physical, mental and emotional well-being of the communities we serve, providing innovative health care of the highest quality at the greatest value.

Our core focus is centered around ensuring excellent quality outcomes for the patients we serve, including easy and convenient access to care, outstanding patient experiences, improving the cost of care and providing ongoing education involving physicians, patients and the community – all right here at home. The Beacon Memorial

Hospital South Bend Heart, Vascular & Stroke group has built a strong strategic presence across Beacon Health system via direct and referral channels, enabling us to compete more actively and realize the synergies of One Beacon, enabling us to reach more patients throughout our communities.

# Celebrating Success

The partnerships we've formed have made 2019 a particularly exciting year for the Beacon Memorial Hospital South Bend Heart, Vascular & Stroke program. Over the past 18 months, through the co-management partnership with Beacon Elkhart General Hospital, we are moving toward an even stronger entity with the potential to become the leading patient-focused, diversified Heart, Stroke & Vascular services provider in Michiana.

## Primary Stroke Center Certification

Both Elkhart General and Memorial hospitals are certified as Primary Stroke Centers by The Joint Commission. This means that patients can expect the highest quality care possible in an environment that's uniquely developed to care for the urgent needs of people experiencing a stroke.

In 2019, Elkhart General and Memorial received recognition from the American Heart Association for their commitment to ensuring stroke patients receive the most appropriate treatment according to nationally recognized, research-based guidelines based on the latest scientific evidence:

### **Beacon Memorial Hospital South Bend**

Get With the Guidelines®-Stroke Gold Plus  
with Target: Stroke Honor Roll

### **Beacon Elkhart General Hospital**

Get With the Guidelines-Stroke Gold  
Plus with Target: Stroke Honor Roll Elite

## Advanced Certification as a Thrombectomy Capable Stroke Center

In 2019, Memorial Hospital earned recognition as a thrombectomy capable stroke center from The Joint Commission in collaboration with the American Heart Association/American Stroke Association.

Thrombectomy, the removal of a blood clot from an artery, can be used to treat strokes.

Memorial Hospital is the first and only hospital in the state of Indiana to earn this certification, and the Memorial stroke center is among only 37 in the country to be recognized as thrombectomy capable by The Joint Commission.



## What else sets us apart?

### Advanced resources and expert staff to help patients prevent, treat or recover from a stroke

#### Specialized Medical Team

The stroke care team includes a fellowship-trained neuro-interventional radiologist, neurosurgeons, and neurohospitalists, along with an outstanding support staff.

#### Specialized testing

We provide imaging, electrodiagnostic services and other tests to diagnose and treat stroke and other neurological conditions. These include NeuroCom® - a painless test to identify and treat balance disorders associated with stroke.

#### Emergency stroke care

Our stroke and neurology experts and other highly skilled professionals provide exceptional emergency and trauma care 24 hours a day, seven days a week.

#### One-on-one recovery

After a stroke, our inpatient and outpatient rehabilitation specialists provide attentive care, enabling patients to work with the same therapist throughout the course of their treatment.

## Additional Accolades & Accomplishments



**Congestive Heart Failure** (through the Joint Commission) and Echo Vascular Lab (ICAEL) Certifications.



**Memorial Hospital** named one of the 50 Top Cardiovascular Hospitals by IBM Watson Health™.



**Post-Acute Care Transition for at Risk Patients**  
Enabling shorter lengths of stay and fewer readmissions, while maintaining quality outcomes and lower cost of care for Heart Failure and COPD patients.



**Updated guidelines for stroke and mechanical thrombectomy**  
Evidence-based guidelines show that a mechanical thrombectomy within 24 hours of last known normal symptoms results in decreased long-term deficits for our stroke patients.



**Expansion of the Structural Heart Program** across multiple hospitals, enabling a Beacon team approach to the Heart, Vascular and Stroke Co-Management program.



**Mayo Heart Failure Collaborative**  
Resulted in a Beacon Heart Failure Committee dedicated to standardizing care system-wide to reduce 30-day readmission and mortality rates for heart failure patients.

## **"I didn't see it coming..."**

Gerald has been a child psychologist for 30 years. He has advanced degrees from University of Chicago and Notre Dame and has dedicated his life to working with children suffering from depression and anxiety. "I feel like it's a calling," he says. "Helping people is my passion."

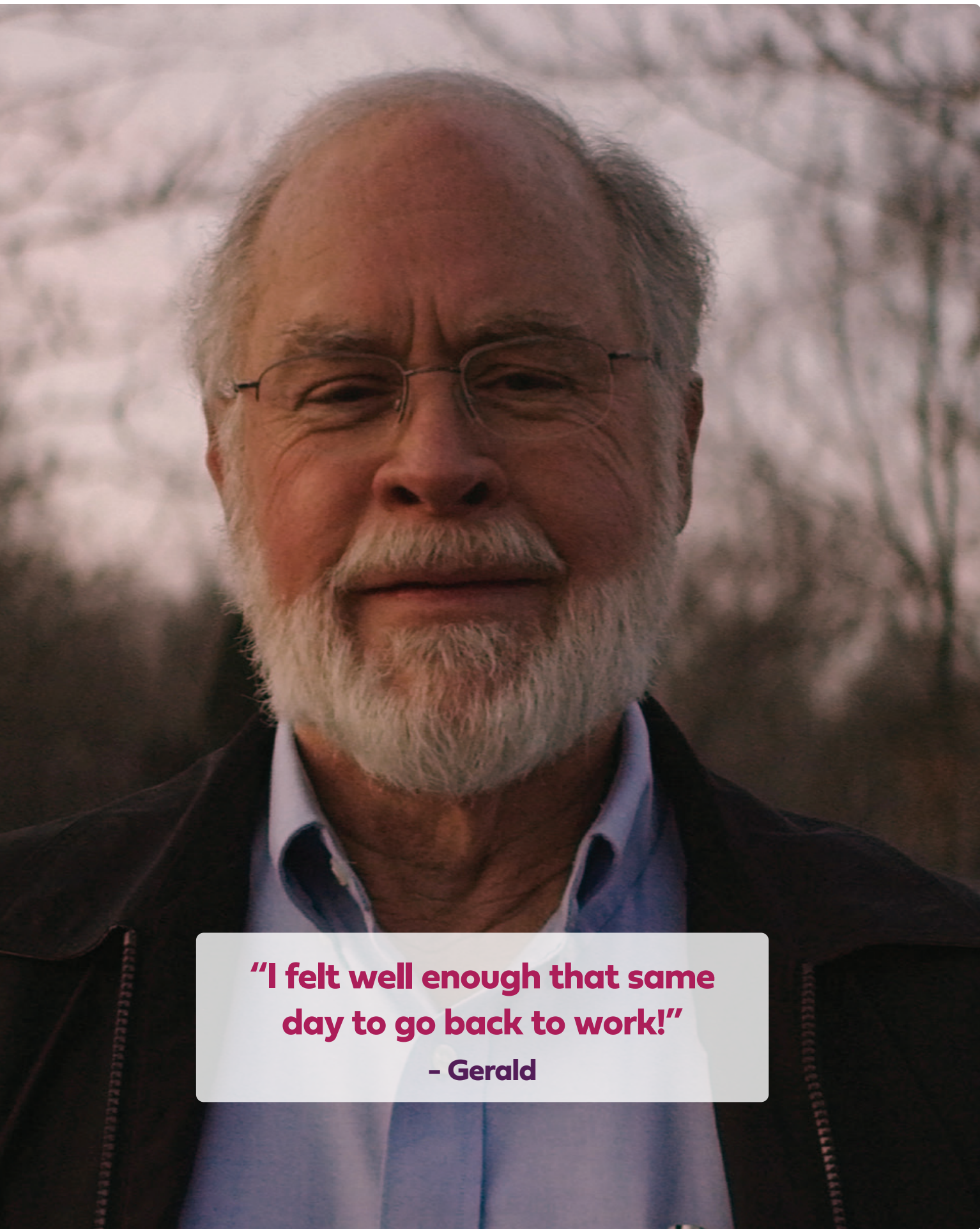
But in October 2018, it was Gerald that would need help, although he couldn't have known it. "I went in for cataract surgery in 2017 and they found a heart murmur," he explains. "I didn't see it coming." Gerald's condition quickly deteriorated, progressing from mild to critical stenosis in less than two years, and would require surgery to replace his main aortic valve. "I felt fine, but they told me I was far from fine and that I might not live to see another year without the surgery."

But Gerald wasn't having that. "I feel like I have more to do on this earth." He did his research and concluded that Beacon Elkhart General Hospital was the right place to be, calling his care team "the best in the business." He adds, "Ten years ago, this would have required open heart surgery, and I would have been laid up in the hospital for weeks – and out of work for months."

His TAVR procedure took only two days. The morning after his surgery, his doctors checked in on him and he was released by noon. "I felt well enough that same day to go back to work!" At age 75, he's back doing what he loves most – caring for his patients and spending as much time as possible with his grandkids (his adult children span the globe from San Antonio to Ontario to Switzerland).

It's a gift he does not take for granted. "Two people I knew died in the meantime with the same issue I had. They did not know their heart was in critical condition." Gerald feels very fortunate, and he lives by the same philosophy he teaches patients: "The label we put on something determines how we feel, not the other way around," he explains. "If your car breaks down, you can be miserable, or you can label it as an adventure. If I'm going to die, I can say: Oh, woe is me! Or, I can say: Wow, what a life I've lived, and I'm going to make the most of what's left!"





**"I felt well enough that same day to go back to work!"**

**- Gerald**



# Quality: The Heart of All We Do

Over the span of the program, from January 2015-June 2019, we targeted 76 performance-based metrics relative to reduced mortality rates, improved overall patient well-being, cost reduction and increased efficiency – factors critical to patients and payors alike.

In recognition of their efforts toward achieving our goals, physicians were eligible for incentive payments based on how well we performed overall. Together we have accomplished a great deal. Our community is getting better. Our physicians are part of a group that is providing better services to patients through continuous quality improvement with positive trending in key quality initiatives. While this information is presented for Beacon Memorial Hospital South Bend only, going forward data will represent both Memorial and Beacon Elkhart as one unified BHS team.

## Performance-Based Results: A True Team Effort

### 32 Physicians:

Cardiologists, CT Surgeons, Hospitalist, Interventional Radiologists, Neurologists, Neurosurgeon, Vascular Surgeons

Through improving operational efficiencies, patients have

**shorter lengths of stay in the hospital**

### 76 Quality Metrics & 27 Cost Savings Metrics

tied to gainsharing over the last 5 years

BPCI Stroke Bundle Payment Performance:

**+ \$116,538**

### Performed better

than national average in Acute Myocardial Infarction, Heart Failure, Coronary Artery Bypass Surgery, and Coronary Interventions (angioplasty)\*

Cost Savings improved through Procurement:

**\$1.2M over the last 5 years**

### Patients are receiving life-saving stroke treatment,

including evidence-based medications, faster than the national average

In 2018 & 2019:

**16 Pay-for-Performance quality initiatives with 94% improvement over 2017**



## MHSB HVS Quality Metrics

### 2018-2019 (Jan-Jun)

MHSB-HVS	National Average	Baseline	Performance
Operational Mortality for CAB/30 days	≤ 1.00	5.50%	0%
CABG Prolonged Intubation	≤ 1.00	8.00%	0%
CABG Pre-Operative Beta Blockage	100%	98%	100%
Evidence based Beta Blocker prescribed at discharge for patients that have LVEF < 40% (CHF)	94.90%	90.10%	92.50%
CHF-EF ≤ 40% will be d/ced home on an ACEi/ARB/ARNI	91.80%	84.90%	92.80%
TAVR 30 Day Mortality	0%	0%	0%
TAVR 30 Day Aortic Regurgitation	0%	0%	0%
% claudicants tx with PVI receiving antiplatelet plus Statin at time of procedure	80.90%	52.00%	81.40%
Stroke patients discharged on statin medication	≥ 98%	93%	94%
Stroke patients discharged on antithrombotic therapy	≥ 99%	97%	98%
Door to tPA ≤ 60 minutes	50%	44%	65%
Door to Groin Average Time for neuro-interventions	113m	117m	104m

## Revenue/Cost Reduction

### 2018-19

Net Technical Revenue Contribution:

**over \$76.8M annually**

Cost reduction recognized through  
Cardiovascular Procurement Committee:

**\$317,723**

**Over \$400,000 savings**

in 2019 from IC/CRM contracting



**"I was in and out of the  
hospital in just three days"**

**- Cheryl**



## **“They saved my life.”**

Cheryl spent 28 days in a coma. She remembers waking up in the hospital, looking at a calendar and asking, “What happened?” That was in 2010, when open heart surgery and its recovery put her life on hold for months.

After her surgery, Cheryl didn’t waste time letting the grass grow under her feet. She hiked the Great Wall of China, enjoyed spending time with her grandchildren and tended to her dairy farm. But, last year, when she experienced shortness of breath while vacationing at Busch Gardens in Tampa, Florida she was terrified. “I thought... Oh no. I don’t know if I can go through that again. Am I going to survive this?”

Cheryl isn’t a worrier by nature – she’s a prayer – and while her doctors at Beacon Memorial Hospital South Bend confirmed that she would need another heart procedure, her prayers were answered in the form of TAVR. TAVR (Transcatheter Aortic Valve Replacement) is a less invasive procedure that uses a catheter to implant a new valve within a diseased one. For Cheryl, this was a lifesaver – in more ways than one.

“I was in and out of the hospital in just three days,” she marvels. “I’m so grateful for Dr. Steinberg. I wouldn’t be here without him.”

Today, Cheryl is back to better than normal, dedicated to spending the rest of her life doing what she loves most – hiking, traveling and baking cookies with her ten grandkids (they call her Farmer Grandma, and she helped deliver two of them).

“To have this level of world class, highly skilled doctors and caregivers – and this technology – so close to home, in our community, not in some far-off big city hospital or clinic... It made all the difference. They saved my life.”

