

2019 Summa Health

Quality Report



Opening Remarks



Back row left to right: Brad Martin, M.D., MHA, FACP, FCCP; Kathy Cubera, RPh; Renee Brinker, PT, MBA, CPHQ
Front row left to right: Connie Slagle, MHA, BSN, RN, CPHQ; Sandy Germano, BSN, RN, NE-BC; Trish Enos, MHL, BS, BSN, RN, CPHQ; Nancy Reynolds, MSN, RN, CIC, FAPIC

The Quality Department at Summa Health is pleased to share the Summa Health 2019 Annual Quality Report. In its pages, you will find many stories that support our values of serving with passion, personalizing care, valuing every person, taking ownership, working collaboratively and partnering with the community.

Our Summa team members have an interest in providing safe, quality and patient-centered care. The various Summa committees, advisory groups, organization workgroups, and community outreach programs help to identify opportunities for improvement. Our teams then work toward solutions collaboratively using best practices, research, data analytics and improvement tools and methodologies. You will see evidence of our work and improvement journeys throughout the report.

Summa Health has made tremendous quality and safety improvements year after year. This work could not be done without the dedicated teams that strive to improve the care of our patients and community. Please enjoy reading through the many achievements of these teams throughout this report. These great outcomes and results show the dedication to fulfill our mission to provide the highest quality, compassionate care to our patients and members and to contribute to a healthier community.

We hope you enjoy the 2019 Quality Report!

The Summa Health System Quality Team

Awards and Accreditations



The Joint Commission

Summa Health System hospitals are accredited by the Joint Commission, meaning we have met The Joint Commission's strict quality and safety measures.



Leapfrog Hospital Safety Grade

Summa Health System Barberton and Akron Campuses achieved respective grades of "A" and "B" in the fall 2019 Leapfrog Hospital Safety Grade.



Healthgrades 2019 250 Best Hospitals Award

Summa Health was ranked among the top five percent of U.S. hospitals in the Healthgrades 2019 250 Best Hospitals Award for clinical performance.



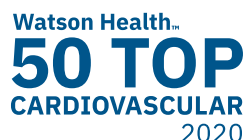
Healthgrades America's 100 Best Hospitals

Healthgrades also named Summa Health one of Healthgrades America's 100 Best Hospitals in six different specialties for 2020 including Cardiac Care, Stroke Care, Pulmonary Care, Gastrointestinal Care, General Surgery and Critical Care.



Get With The Guidelines® Stroke Gold Plus Quality Achievement Award

Summa Health Stroke Care Center has been nationally recognized for earning the American Heart Association (AHA) and American Stroke Association's Get With The Guidelines® Stroke Gold Plus Quality Achievement Award. Summa is the only hospital in the Akron area to have received the American Stroke Association Get with the Guidelines Gold Plus Award consecutively since 2010.



IBM Watson Health™

Summa Health System – Akron Campus was ranked among the top 50 cardiovascular hospitals in the U.S. by IBM Watson Health™. The annual study identifies top performing U.S. hospitals for inpatient cardiovascular services based on a balanced national scorecard of hospital performance metrics.



Thrombectomy-Capable Stroke Center

In 2019, Summa Health System-Akron Campus was awarded the Thrombectomy-Capable Stroke Center certification from The Joint Commission, in collaboration with the American Heart Association/American Stroke Association. By earning this honor, Summa Health became the first hospital in Ohio to be awarded this certification.



Healthgrades 2019 Specialty Excellence Award

Healthgrades awarded the 2019 Specialty Excellence Award for the Treatment of Stroke to our Akron Campus, making us the only hospital in Summit County to earn this high honor.



AMERICAN COLLEGE OF SURGEONS Verified Trauma Center

Level 1 Trauma Center

Summa Health Akron Campus was re-verified as a Level 1 Trauma Center by the Verification Review Committee through June 25, 2022.



Healogics President's Circle

The wound care and hyperbaric medicine centers at both St Thomas and Barberton Campuses achieved this great honor in 2019. This puts them in the top 5% of centers for operational and clinical outcomes and is reserved for the 32 out of 632 eligible Centers that have achieved or exceeded outstanding clinical and operational results in 2019.

Summa Health System Hospitals

COPD Disease Management

Summa Health serves a large number of patients with Chronic Obstructive Pulmonary Disease (COPD) within the system's surrounding communities. Building on 2018's great work with the continuous growth of Summa's CHIP (COPD Home Intervention Program), Summa rolled out many other 2019 initiatives devoted to improving the quality of care for COPD patients in our communities. For example, we implemented a system-wide COPD Care Pathway to deliver consistent and standardized, evidence-based care to all inpatient COPD patients. This COPD Care Pathway helped to improve our quality metrics regarding complications of care, length of stay, and mortality, all of which showed improvement and resulted in better than the average quality metrics of similar hospitals for COPD patients during 2019. We look forward to continued improvement with our COPD care at the start of 2020 with the implementation of the first ever Summa COPD & Asthma Navigator position as well as the rollout of outpatient COPD clinics within the Summa Health Medical Group.

2019 Quality Metric Category	Summa Health System	Comparison Hospitals
Complications of Care	0.63%	0.82%
Length of Stay (days)	4.73	4.93
Mortality	1.96%	3.11%

Department of Surgery, Division of Trauma

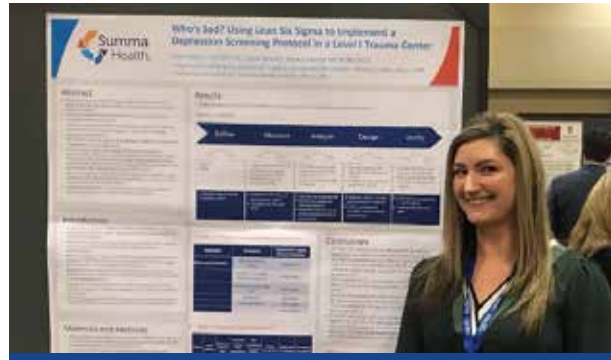
Summa Health System – Akron Campus is an American College of Surgeons (ACS) verified Level I Trauma Center and we are committed to providing evidence-based care to our trauma patients. Being a Level I Trauma Center means Summa Health is committed to ensuring we meet the scrutiny of a detailed programmatic re-verification review every three years. Furthermore, we are committed to continuously improving our services as a Trauma Center, which involves scholarly activity (research, process improvement, and program evaluation).

In 2019, Summa Health Akron Campus was re-verified as a Level I Trauma Center by the Verification Review Committee. Verified trauma centers must meet the essential criteria that ensure trauma care capability and institutional performance, as outlined by the American College of Surgeons' Committee on Trauma in its current Resources for Optimal Care of the Injured Patient manual. This achievement recognized the trauma center's dedication to providing optimal care for injured patients. In addition to acute care responsibilities, Level I Trauma Centers have a major responsibility for providing leadership and education, research, and system planning.

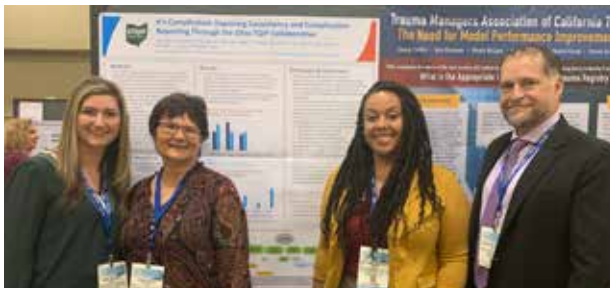
In 2019, the Division of Trauma produced numerous projects related to scholarly activity. Trauma had multiple peer-reviewed publications in a variety of journals, which included: the *Journal of Trauma and Acute Care Surgery*, *StatPearls*, the *American Journal of Emergency Medicine*, the *Quality Management in Health Care, Disability and Health Journal*, and the *Journal of Medical Education Curriculum Development*. Additionally, Trauma had three abstracts accepted to the Trauma Quality Improvement Program (TQIP) annual conference. Research Program Director for Trauma, Dr. Mary Moran, had a platform presentation, *Die Comfortably With Us: Improving a Mature Palliative Program at a Level I Trauma Center*, a poster presentation, *Who's Sad? Using Lean Six Sigma to Implement a Depression Screening Protocol in a Level I Trauma Center*, and was a driving force behind the Ohio Trauma Quality Improvement Program (OTQIP) Collaborative poster presentation *It's Complicated: Exploring Consistency and Complication Reporting Through the Ohio TQIP Collaborative*. Summa Health is heavily involved at a state level with Dr. Richard George's contribution as the Clinical Lead for OTQIP, which has a number of subcommittees dedicated to improving trauma care across the state of Ohio.



Dr. Richard George and Dr. Mary Moran at the ACS TQIP annual conference after her oral presentation, *Die Comfortably With Us: Improving a Mature Palliative Program at a Level I Trauma Center.*



Dr. Mary Moran at the ACS TQIP Conference in front of her poster presentation *Who's Sad? Using Lean Six Sigma to Implement a Depression Screening Protocol in a Level I Trauma Center*



Dr. Mary Moran, Anne Moss, Alex Carpenter, and Dr. Richard George (from left to right) at the ACS TQIP annual conference in front of the Ohio TQIP Collaborative poster presentation, *It's Complicated: Exploring Consistency and Complication Reporting Through the Ohio TQIP Collaborative.*

Just as the silos of healthcare continue to break down, the ability to collaborate with other departments is something that has continued to increase over the past year, in keeping with our philosophy of an integrated multidisciplinary care team.

Summa Health has successfully implemented a number of Mass Casualty Incident (MCI) simulation drills with a multidisciplinary team that includes representation from Trauma, Emergency Preparedness, Simulation Laboratory, Emergency Department (ED), Operating Room (OR), Inpatient Nursing Units, and many other departments. There have been numerous presentations that have been a result of the MCI preparedness efforts. The Trauma team was invited to collaborate with the OR and Sterile Processing to create a poster presentation, which was accepted, for the Association of periOperative Registered Nurses (AORN) Global Surgical Conference and Expo titled, *Can You Make the Cut? An Operating Room's Journey to Mass Casualty Preparedness.* Additionally, some of our Nursing leaders invited Trauma to collaborate on a presentation to the Ohio Organization of Nurse Executives (OONE), Survey says: Using surveys to measure nurses' perspectives of MCI simulation drills. The scholarly activity in 2019 was notable and we are excited about the opportunities. There is one MCI manuscript submitted for publication and a number of others that Trauma is hoping to submit for publication this year.

Trauma has also been involved with Performance Solutions and ensuring that many of the team members are pursuing the Lean Six Sigma (LSS) program that Summa Health offers. The collaboration and mentorship from LSS Black Belts, Jamie Kish and Ashley Sedorovich, not only led to the completion of Dr. Mary Moran's Green Belt and the poster presentation, *Who's Sad? Using Lean Six Sigma to Implement a Depression Screening Protocol in a Level I Trauma Center,* but its acceptance as a publication in the *Journal of Quality Management in Health Care.*

In 2019, Summa Health Medical Group hired its fifth Surgical Critical Care boarded Trauma Surgeon, Dr. Rathna Shenoy, a graduate of the Summa General Surgery Program and further supporting the care of injured, critically ill, and/or emergency general surgical patients. Trauma Program Manager Kindra Hatridge, RN, BSN, TCRN served on the Northeastern Ohio Regional Trauma Network (NORTN) Executive Committee as past chair, furthering Summa Health's outreach.



Back row left to right:
Deb Logan, BSN, RN;
Dawn Thompson, ASN, RN;
Christie Ketler, ASN, RN; Marty Muckley, MSN, RN;
Matthew Gustovich, BE, LSSBB
Front row left to right: Ying Liu, BSN, RN; Crystal Gauder, BSN, RN

High Intensity Cardiac Unit

The High Intensity Cardiac Unit (HICU) opened April 15, 2019 on Summa Health System — Barberton Campus. The intentions were to improve patient outcomes and readmission rates associated with the congestive heart failure and acute coronary syndrome patients. The concepts attributing to these efforts are to improve patient self-care and eliminate gaps in the coordination of care.

Actions put into place related to these concepts include:

- Contacting primary care physician regarding admission to the hospital
- Detailed efforts to define an accurate home medication list
- Access to medications prior to discharge utilizing the meds to beds program
- Education regarding the disease process to include home support person
- Scheduling appointments prior to discharge at a time that will work for the support person taking them to the appointment
- Repetitive sit down education sessions including the patient and their support person
- Connecting the patient with community resources

Educational efforts includes:

- Active participation in daily weights
- Active participation in monitoring intake
- Learning to read nutrition labels
- Controlling risk factors associated with smoking, exercise and weight management

“The high-quality patient and family-centered care we provide in the HICU serves our Barberton community and the surrounding region. Our new approach to cardiac care has resulted in top decile performance and has reached double-digit growth since its inception.”

TJ De Angelis, VP, CNO-Barberton Campus

“The dream of HICU is to provide patient a stronger community and support system by giving patient's the necessary knowledge to thrive in the community. Through strong teamwork to build a healthier stronger community together.”

Ying Liu, RN

“Coming to work in the HICU provided me with new opportunities to impact patient care quality improvement efforts by removing barriers in understanding disease management and ease the transition home for patients dealing with heart failure and coronary artery disease.”

Crystal Gauder, RN

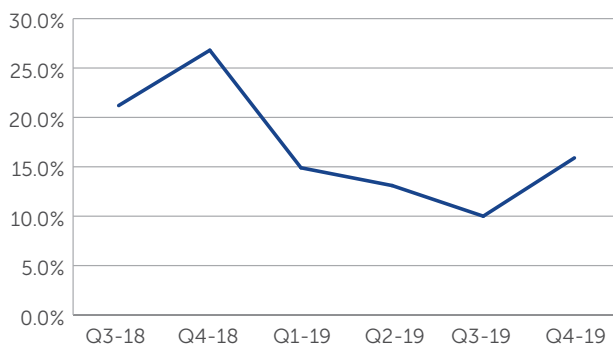
“We have had the pleasure of caring for many patients that we were not able to reach prior to. I feel as if we have had a major impact on the community being able to treat and teach this critical population.”

Dakota Black, RN

Readmissions

The Heart Failure 30-day readmission rate for all inpatients on Barberton Campus improved with a considerable downward trend after the HICU opened (see trend chart). For readmissions specific to the HICU, there were lows of **1** readmit out of **41** inpatients (**2.4%**) in September and **0** readmits out of **35** inpatients (**0.0%**) in October.

**Summa Health - Barberton Campus
Heart Failure 30-Day Readmission % - All Payer**



	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019
Readmissions	14	19	14	14	8	14
O/E Ratio	1.15	1.5	0.8	0.72	0.59	0.95
Rate	21.2%	26.8%	14.9%	13.1%	10.0%	15.9%

Patient Satisfaction

After a Target Goal (**78.5%**) and a Stretch Goal (**80.8%**) were established for “**Communication with Nurses**” in June, the HICU surpassed both goal thresholds in six (**6**) of the seven (**7**) months in 2019 (see table). The end of year Top Box score was **89.1%**, which achieved at the **90th** percentile rank.

**HCAHPS Patient Experience Scores (%Top Box)
HICU: Communication with Nurses**

Month	Score	Target	Stretch Goal
June	83.3%	78.5%	80.8%
July	81.0%	78.5%	80.8%
August	90.5%	78.5%	80.8%
September	100.0%	78.5%	80.8%
October	100.0%	78.5%	80.8%
November	100.0%	78.5%	80.8%
December	75.0%	78.5%	80.8%

24/7 STEMI Coverage

In April 2019, the Summa Health System – Barberton Campus ramped up their 24/7 STEMI coverage. To support this effort, four new staff members were on-boarded along with establishing the role of Cath Lab Clinical Coordinator (Chris Belknap, RN). All equipment was standardized to mirror the Akron Campus Cath Labs. In addition to constructing a new helipad alongside the hospital parking lot, Summa Health – Barberton Campus also entered into an agreement with Metro Life Flight to facilitate the transfer of patients to the next level of care.

Since the initiative kicked off in tandem with opening the High-Intensity Cardiac Unit (HICU), the Cath Lab established a program to cross-train with the HICU staff for additional coverage on high-acuity cases.

“The team we have developed here at Barberton is second to none,” shared Christine Belknap, RN. “The collaboration between the Emergency Department, Cath Lab and the High-Intensity Cardiac Unit ensures that the patient receives consistent, quality care every step of the way.”

The 24/7 STEMI ramp up resulted in both growth volume and clinical quality metrics:

Volume

- Total cases were up 17% from 2018
- Emergent cases were up 73% from 2018

Quality

- 2019 Barberton Campus median Door-to-Balloon time for emergent patients was 59.7 minutes.
- The national goal, which is established by the American College of Cardiology, is 90 minutes.
- **We are getting patients to treatment 30.3 minutes faster than this goal!**

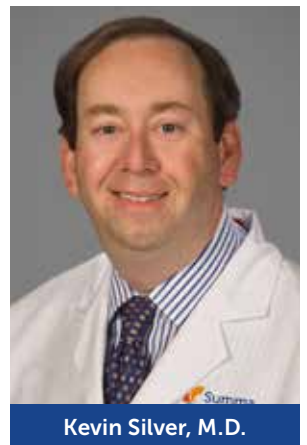
The initiative has also positively impacted communities within the Southwest Region. As a result of consistent 24/7 STEMI coverage at Summa Health – Barberton Campus, local EMS crews were able to return to service within approximately 20 minutes. Transferring emergent patients to Akron required longer turnaround time. This is a significant reduction of overtime costs to municipalities and contributes to safer communities since the EMS squads are able to respond more quickly to other emergencies.

For educational outreach, the Summa Health Medical Group Interventional Cardiologists routinely visit local EMS crews.

“We are committed to delivering top-notch cardiac care to the local community,” said Kevin Silver, M.D. “The skill, professionalism and dedication of our local first-responders has played a huge role in the success we’ve had in 2019.”



Christine Belknap, RN



Kevin Silver, M.D.





Kevin Nanna MSN, RN; Kelly Glendon, MBA, BSN, RN, CNOR; Nancy Reynolds, MSN, RN, CIC, FAPIC

A Culture of Continuous Improvement in Surgical Services

Monitoring outcomes of abdominal hysterectomies is one of the Centers for Medicare & Medicaid Services (CMS) Hospital Inpatient Quality Reporting Programs via the Center of Disease Control's National Healthcare Safety Network. Summa Health System is actively engaged in these CMS programs designed to improve the quality of care and experience for hospital patients.

CMS requires health systems to show a continuous reduction in the number of surgical site infections (SSI). The concept of a continuous cycle of improvement aligns with our quality and safety culture. To start this cycle of improvement, a team of surgeons, surgical department leadership, operating room staff, infection prevention staff, quality improvement, and process engineering assembled with a shared goal of reducing and eliminating SSIs for patients having an abdominal hysterectomy.

Understanding that it can be the processes that set people up to fail, the team incorporated Lean/Six-Sigma tools to help drive to a root cause and implement data driven solutions. The department of surgery follows the nationally recognized Association for Professionals in Infection Control and Epidemiology (APIC) guidelines for reducing surgical site infections. Specific to hysterectomy procedures, the team utilized best practice care bundles as outlined by the American College of Obstetricians and Gynecologist. The interdisciplinary team compared surgical site infection cases with these established guidelines to determine any deviations in quality of care. However, after review, no deviations from the guidelines were identified when reviewing all surgical site infection cases reported in 2019.

The team brainstormed ideas for why patients have SSI after a hysterectomy procedure. The team had transparent conversations that focused on the process of delivering care to patients. It was not uncommon for team members to acknowledge that although they follow best practice guidelines, there is always room for improvement. As such, members of the team were tasked with finding and implementing solutions to the opportunities identified. The group's consensus was that they could not truly identify the root cause for decreasing surgical site infections for hysterectomy procedures without input from more members of the surgical team.

One of the best ways to understand how a process works is to observe it. The process improvement team spoke with surgical staff and observed hysterectomy cases in the operating room. They gained valuable input from all members of the surgical team. What made this more exciting was staff's engagement to improve the process for better patient outcomes. It was not uncommon for a member of the surgical team to ask, "Where can we make improvements?" or "how can we do things better for our patients?" In addition, they wanted to be part of the solution as they took a lot of pride in caring for patients who trust them to perform surgery.

The collaboration and direct observations of the multiple processes involved in an abdominal hysterectomy procedure lead to the identification of variability in some processes or practices. When the variability was discussed with caregivers involved, the processes and practices were standardized and the team started to see positive results. In the end, after the standardization of practices, there were no further surgical site infections in 2019. Working together, this group of individuals came together for a shared goal and improved patient care.

Workplace Violence Task Force

Workplace violence in healthcare is a world-wide issue. Occupational Safety and Health Administration (OSHA) reports healthcare workers represent 50% of all workplace assaults from all industries. Summa's Workplace Violence Task Force initiated new processes to establish a consistent means of assuring all Summa healthcare workers have advance warning if a patient has demonstrated threatening or violent behavior (verbal or physical). With the advance warning, employees can take precautions and be more alert to potential threats. Three communication initiatives rolled out during 2019:

- Daily safety huddle identification of patients with a potential for violence
- Visual indicator (violet circle) on the patient's room door frame to be observed by all who need to enter the room (clinical staff, dietary, therapies, maintenance, etc.)
- EPIC flag stating patient has a potential for violence. This populates the "Ticket to Ride" document on the inside front of the patient's chart referenced by transportation personnel and the diagnostic and treatment areas to which the patient travels.

Evaluation of the effectiveness of these and other initiatives are best measured by cost of employee injuries related to violent patient encounters.

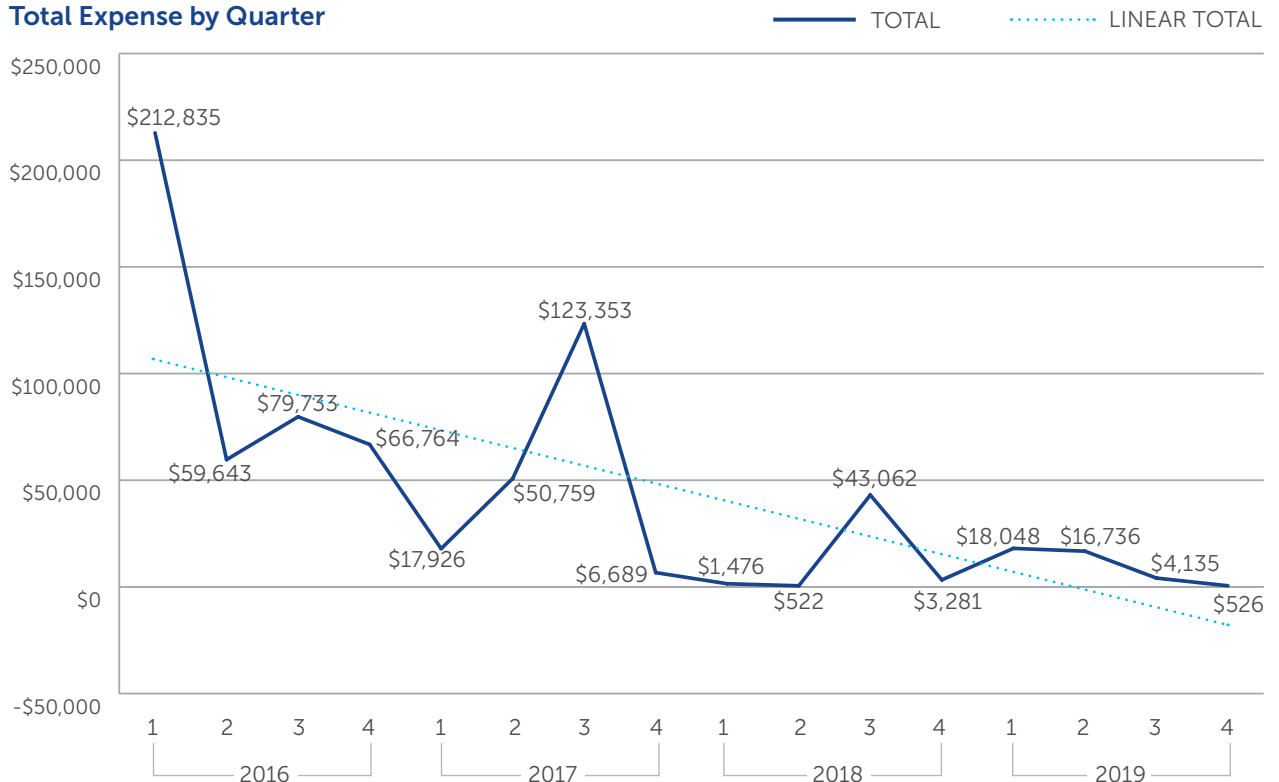
Other simultaneous initiatives in 2019 included:

- Protective Services/Police Officer purposeful rounding on those patients identified as having a potential for violence during daily huddle. The rounding includes a touch-base with the clinical staff caring for the patient to ensure maximal collaboration.
- Public signage posted indicating intolerance for violence against healthcare workers.
- Hard-wired a process to escalate to senior leaders when patient behavior is not de-escalating.

Ongoing projects going into 2020:

- Hardwire leadership follow-up support plan for employees impacted by violence in the workplace.
- Developing/planning a K9 program that will further enhance the abilities to de-escalate patients, visitors and public with both known and unknown potential for violence.

Total Expense by Quarter





Welcome

Summa Health is a healing environment.

Please treat others with kindness and respect.

We have a zero tolerance policy for any type of aggression including:



Aggression may result in removal from the facility and/or prosecution.

Summa Health

Contact Protective Services for a Code Violet any time if you feel threatened or concerned.



Daily Huddle

- Notify your Unit Director of patient's potential for violence.
- Unit Directors report violent patients in daily huddle meetings
- Protective Services will frequently round the areas of these patients

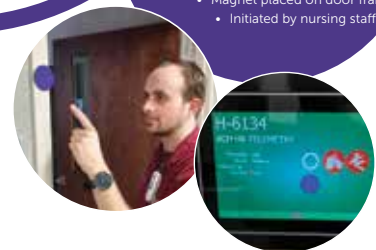
Increasing awareness of Workplace Violence (WPV)

Safety for all employees



Code Violet

- Alerts all employees entering patient rooms that this is a patient with a history of or is at risk for violent behavior
- Magnet placed on door frame
- Initiated by nursing staff



EPIC Flag

- Staff are to flag patients within EPIC to communicate to all healthcare team members on the "Ticket to Ride" as the patient moves throughout care



Forms of violence:

- Sexually Inappropriate Behavior (verbal or physical)
- Biting
- Kicking
- Punching
- Pushing
- Pinching
- Scratching
- Spitting
- Name Calling
- Intimidating
- Threatening
- Yelling
- Harassing
- Stalking
- Beating
- Choking
- Stabbing
- Killing
- Grabbing
- Cursing/Swearing
- Licking
- Kissing
- Groping

Resources to learn more

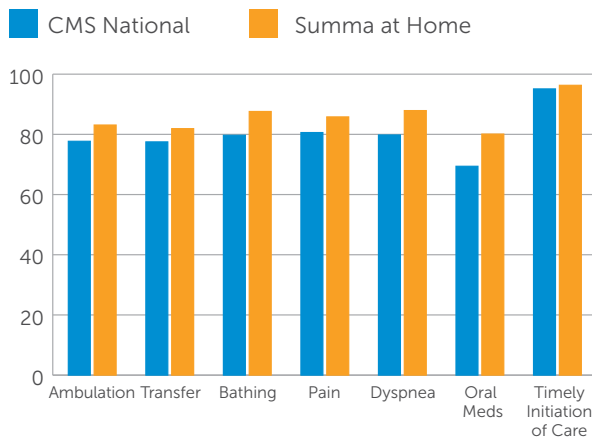
- Visit Summa@Work under Links for Nurses in the right hand column
- enA.B.L.E.® Class
- Non-Violent Crisis Intervention Class

Summa Health at Home

Star Rating

The Home Health Star Rating is a unique tool that consumers, providers and other stakeholders are using to summarize current measures of home health providers' performance. Summa Health at Home has improved to a 4 Star rating. Our continued commitment for improvements in the Star Rating and patient outcomes are highlighted in ongoing initiatives:

Quality of Patient Care Star Measure



Summa Cardiac Rehabilitation In-home Program (SCRIP)

Home Care and Summa Health Cardiology group collaborate to improve care for patients following a cardiac event or surgery.

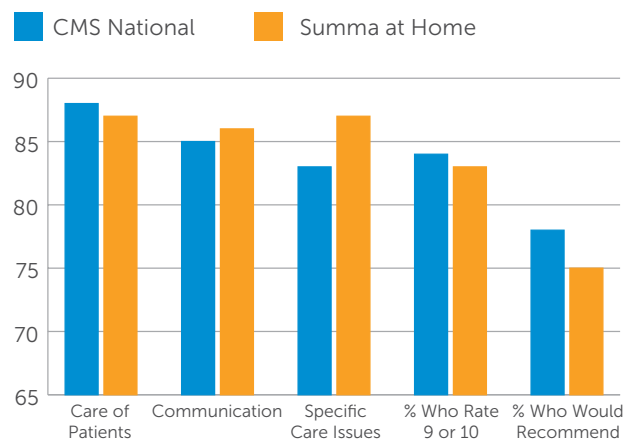
The goals of this program are promoting healthy eating, increasing physical activity, weight management, medication management, stress management and reducing re-hospitalizations. Data has demonstrated an overall decrease in hospitalizations for patients participating in the program and also improved connectivity with cardiology follow-up and disease management.

Patient Experience

Summa Home Health is committed to exceeding the national average for patient satisfaction scores. Quality improvement initiatives are currently focusing on increasing the percentage of patients who would recommend our agency and who would rate us a 9 or 10.

HHCAPS Measure	CMS National	Summa at Home
Care of Patients	88%	87%
Communication	85%	86%
Specific Care Issues	83%	87%
% Who rate 9 or 10	84%	83%
% Who would recommend	78%	75%

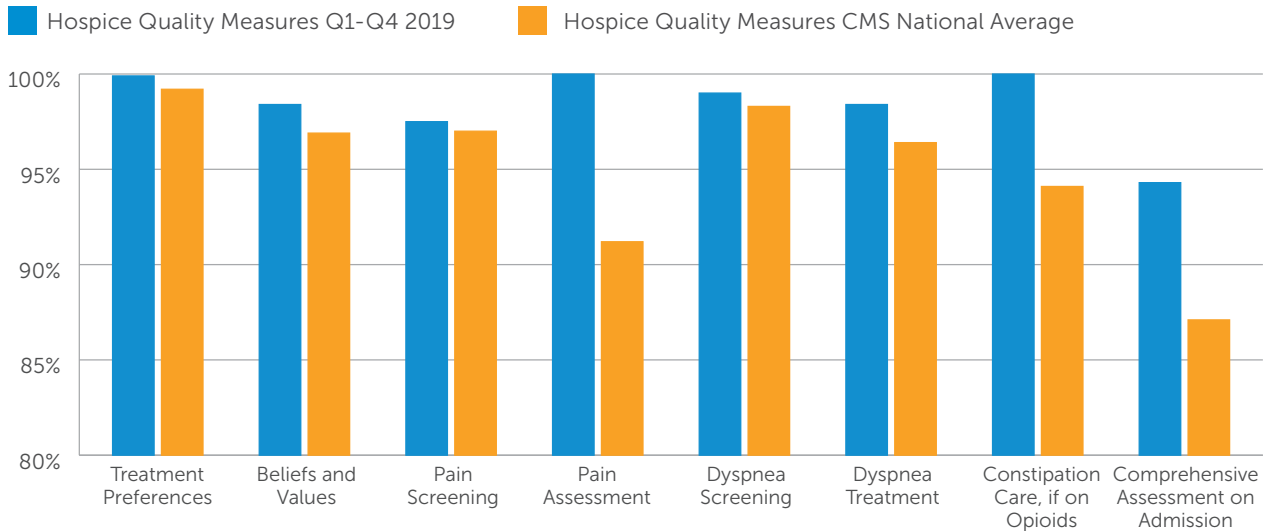
Patient Satisfaction Survey Results



Hospice Quality Metrics

Summa Hospice achieved outcomes at or above the national average in all categories the hospice quality measures in 2019. Quality improvement for 2020 is focused on continuing to improve all the quality measures for all patients we care for.

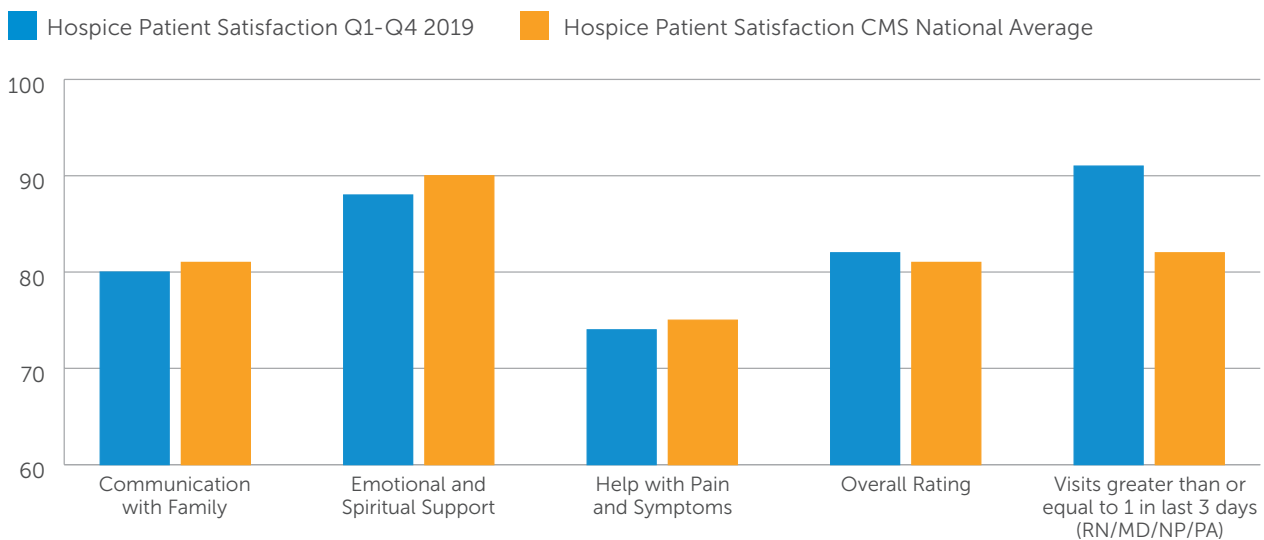
Summa Hospice Quality Measures



Hospice Patient Satisfaction

Patient satisfaction survey outcomes include information on holistic symptom control, education and communication with caregivers, and access to care. Summa Hospice initiatives in 2020 are currently focusing on clinician education to align quality care and survey performance as well as ensuring emotional and spiritual support and training for family members around patient care.

Summa Hospice Patient Satisfaction



Summa Health Medical Group

In 2019, Summa Health Medical Group made significant progress toward our vision of building a high-performing multi-specialty group. Summa Health Medical Group added 46 new providers, expanded numerous service lines and opened a variety of new facilities.

Here are some examples of how the quality of care was improved in 2019:

- High blood pressure process improvement across the medical group addressing second take and follow-up communication from specialty to primary care
- Hierarchical Condition Categories (HCC) is a risk adjustment model designed to estimate future healthcare costs. Over the years, Summa Health Medical Group has focused on appropriately identifying our patients at the highest risk and accurately recording their true disease burden to help focus our efforts on those who need it most to improve the quality of care we deliver: HCC SHMG; (2017 0.87) (2018 0.938) (2019 1.094)

Gastrointestinal

- GI added hospitalist, EUS Services, additional APP for IP service and added VERSOS, our independent GI physicians partnering to provide hospital coverage at ACH and another independent GI physician group partnering to provide hospital coverage at Barberton

Oncology

- Medical oncology saw growth with the addition of two new physicians and integrated palliative care into the office setting

Pride Clinic

- Pride Clinic received two grants (Women's Circle and Gay Endowment)

Primary Care

- Annual wellness visits increased schedule rate by 24% and reduced denial rate from 4.2% to 3.5%
- Primary care expanded Care Management Services to two additional practices and six new full-time equivalent Care Manager positions approved, allowing coverage expansion to all primary care offices in 2020
- Addition of team members focused on Primary Care Provider Template management and access to services and a Primary Care Centralized MA designed to assist in closure of care gaps via outreach and care management navigation
- Improved Anthem Star Rating to a five and overall star rating improved for mammograms
- Implemented OSHA fridge control audit, sample management and process optimization
- IUD implementation cost savings initiative active and successful
- Targeted quality measure campaigns launched with HTN posters, Living with DM pamphlets, MyPlate – "How to Read a Nutrition Label" and the "Know Before You Go" campaign
- Healthy Planet provider dashboard allows primary care providers and clinical staff to understand the health of the population they care for, as well as provides a data display populated with real-time data guiding care gap closure and preventative wellness gaps



Create your plate

Know your nutrients,
portion and serving size

Dairy
3 cups each day
Switch to fat-free or low-fat (1%) milk

1 cup dairy=

- 1 cup low-fat yogurt
- 1½ ounces low-fat cheddar or string cheese
- 1 cup fat-free or low-fat milk including flavored milk

Vegetables
2-3 cups each day
Vary your veggies

1 cup vegetables=

- 1 cup broccoli
- 1 cup tomatoes
- 2 cups raw leafy greens, like spinach

Grains
5-8 ounces each day
Make at least half your grains whole grains

1 ounce grains=

- 1 slice whole wheat bread
- ½ cup cooked pasta or brown rice
- 1 cup ready-to-eat breakfast cereal

Protein
5-6½ ounces each day
Go lean with protein

1 ounce protein=

- 1 ounce cooked lean meat, poultry or fish
- 1 large egg
- ¼ cup cooked beans

Fruits
1½ - 2 cups each day
Focus on whole fruits

1 cup fruit=

- 1 cup berries (raspberries, strawberries, blueberries)
- ½ cup dried fruit

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Know before you go!

For life threatening emergencies, always go to the ED,
But if you have any of the following symptoms:

- Cough
- Sore throat
- Nausea
- Diarrhea
- Dizziness
- Ear pain
- Sinus pain/drainage
- Fever
- Headache/migraine
- Dental pain
- Rash/insect bites
- Pain w/ urination
- Lower back pain
- Routine screenings for flu, strep, TB, STD's and pregnancy

Then call our office!

We have nurses available 24 hrs. a day 7 days a week to help!

We have same day and next day appointments available to get you treated for your acute illness and on the way to feeling better without the high cost and hours spent in the ED!

SMG-19-43618/CS/9/18-19

Trauma

- Expansion of trauma service providers with surgical critical care boarded trauma surgeon and APP, while expanding coverage to a surgical critical care services (SICU consult service)
- Expanded acute general surgery call coverage
- Trauma services recruiting for trauma related NIH-funded studies and optimized PI/Peer Review with 1.0 FTE PI RN
- Trauma services implemented a consistent monthly multidisciplinary Mass Casualty Disaster Simulation Drills at Barberton

Rewards and Recognition

- Summa Health Medical Group Credentialing received 100% score from NCQA Accreditation for Delegated Privilege

- Obstetrics received AIUM Ultrasound Practice Accreditation
- Primary care recertified PCMH. Requirements of certification included the completion of five PI projects focused on documenting outcomes and two PI projects related to patient experience in each practice
- Radiation oncology received American College of Radiology Reaccreditation
- Trauma services re-verified as a Level I Trauma Center without any deficiencies

Moving forward, Summa Health Medical Group will continue its journey toward high performance. We will provide ongoing improvement in physician, APP and staff engagement; further enhance the patient care experience; meet or exceed our financial targets; and persist in building trusting relationships throughout our growing organization.

SummaCare received a rating of 4.5 stars (out of 5) by the Centers for Medicare and Medicaid Services (CMS). The annual star ratings help beneficiaries determine how well a health plan is performing in areas such as:

- How satisfied members are with the health plan
- How well the health plan detects and prevents illnesses
- How quickly and how well the plan handles member appeals

Using Lean Six Sigma tools to implement process improvements across SummaCare, teams were able to deliver results leading to valuable, lasting change. Some of the areas of improvement include:

Data Source	Measure Name	2019 Star Rating	2020 Star Rating
CMS PDE	Medication Adherence for Hypertension	★★★★	★★★★★
HEDIS	Diabetes Care – Poor HbA1c Control	★★★★	★★★★★
HEDIS	Colorectal Cancer Screening	★★★★	★★★
HOS	Monitoring Physical Activity	★★	★★★
HOS	Improving or maintaining mental health	★★★★★	★★★★★
CAHPS	Overall Rating of Health Care Quality	★★★★★	★★★★★
CAHPS	Getting Appointments and Care Quickly	★★★★★	★★★★★
CAHPS	Getting Care Needed	★★★★★	★★★★★
Appeals Data	Health Plan makes timely decisions about Appeals	★★★★★	★★★★

SummaCare’s Quality Management and 5 Star Committee continued to execute existing clinical campaigns that have demonstrated success and increased member outreach. By beginning campaigns early in the year, members had ample time to schedule appointments, screenings or tests. The exchange of information from high volume labs and EMR’s was improved to allow Condition Management teams to engage health plan members earlier to establish healthy lifestyle and behavior changes. Member satisfaction surveys were analyzed and action plans were implemented to improve member experience. Primary Care engagement has increased through regular communication sharing member care gaps. These steps led to more members receiving appropriate screenings, vaccinations and interventions.

NewHealth Collaborative

The medical home model offers a roadmap to redesign care resulting in better, more coordinated care with better outcomes for all patients. With seventy-three percent (50/68) of NewHealth Collaborative (NHC) primary care practices demonstrating a commitment to nationally recognized Patient-Centered Medical Home (PCMH) standards in 2019, NHC is well-positioned for success in value-based payment models.

New in 2019, the National Committee for Quality Assurance (NCQA) required annual PCMH recognition renewal. This is a change from renewing recognition every three years and supports sustained processes and ongoing assessment of performance and optimization of care team processes in order to enhance access to primary care services for team-based care and continuous quality improvement.

Support for Value Based Payment Success

NewHealth Collaborative offers support to primary care practices to utilize data to improve performance, identify and manage patients who have uncontrolled chronic conditions such as diabetes or hypertension, improve care coordination and provide comprehensive patient-centered care that focuses on the whole person.

The Advanced Primary Care Committee met throughout 2019 to offer a forum for practices to share knowledge, ideas and experiences. Data transparency was promoted with the distribution of quarterly practice Quality Dashboards ranking practice's quality metric data for four clinical quality metrics: Blood Pressure Control, Diabetes Control, Breast Cancer Screening, and Colorectal Cancer Screening. Practices could see their performance in relation to other primary care practices and in relation to the NHC average rate, as well as the four and five star target rates. These reports also presented the number of additional patients needed to achieve the four and five star targets for each metric. The ranking information inspired friendly competition among sites and promoted quality improvement work within their care teams to establish goals and implement improvement tactics.

Q4 2019 Provider Quality Dashboard
All Patient Populations

Source Data: Independent Practices MD Datasor, SHMG Explorer

HTM		DM		GCS		CPCS	
Practice	Rate	Practice	Rate	Practice	Rate	Practice	Rate
Average	72%	Average	72%	Average	63%	Average	63%
4 Star	15%	4 Star	15%	4 Star	16%	4 Star	10%
5 Star	0%	5 Star	0%	5 Star	0%	5 Star	1%

December 2019 Provider Quality Dashboard
All Patient Populations

Source Data: Independent Practices MD Datasor, SHMG Explorer

Practice	Den	Num	Rate	DM Control	
				4 Star # Pts Needed	5 Star # Pts Needed
Average	1111	79%	82%	78%	87%
4 Star					
5 Star					

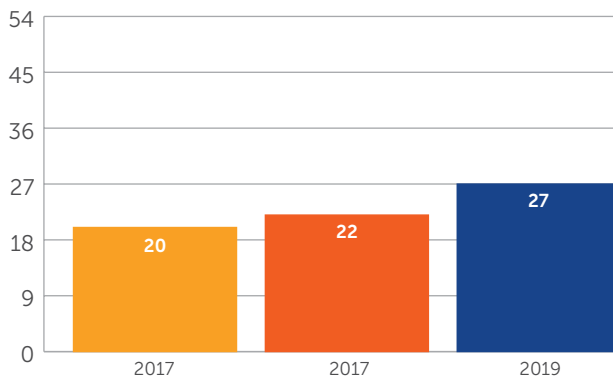
Practice	Den	Num	Rate	4 Star # Pts Needed	5 Star # Pts Needed
Austin Primary Care	2,370	1,186	50.0%	580	745
Barberton Family Practice	507	419	78.0%	0	21
CHC Barberton	765	574	75.0%	0	53
CHC Canal Fulton	2,951	1,631	63.9%	112	266
CHC Doylestown	627	499	79.0%	0	25
CHC Green FP	1,769	1,469	83.5%	0	0
CHC Harville	1,718	1,504	87.5%	0	0
CHC Louisville	2,456	2,014	82.0%	0	0
CHC Manchester	1,424	1,174	82.4%	0	0
CHC Massillon FP	3,592	2,378	66.2%	396	567
CHC Norton FP	1,538	1,035	67.3%	119	226
CHC Stow-Kent	1,837	1,462	79.6%	0	44
CHC Wadsworth	480	389	81.0%	0	5
Family Medicine Center	989	668	67.6%	73	142
Family Physicians Inc.	7,635	5,707	74.7%	19	554
Family Practice Ctr Wads	938	1,261	134.4%	0	29
Harville IM	433	379	87.5%	0	0
IMP-Canton	4,420	3,213	72.7%	102	411
IMP-Minerva	2,148	1,664	77.5%	0	97
IMP-Minerva	3,336	2,527	75.7%	0	209
Internal Medicine Center	1,538	997	64.9%	157	284
MPCC - Akronwood	732	470	64.2%	79	130
MPCC - Alliance	1,015	443	43.6%	161	217
MPCC - Belden	588	283	48.1%	157	188
MPCC - Canalton	1,294	712	55.0%	253	349
MPCC - Jackson	1,944	1,099	56.6%	483	606

Source Data: Independent Practices MD Datasor, practice EMR, SHMG Explorys

As of December 2019, 50% (27/54) of NHC primary care practices who had data available to include in the Dashboard Report achieved the 4 Star target for Blood Pressure Control, and 40% (22/54) of NHC primary care practices achieved the 4 star target for Diabetes Control.

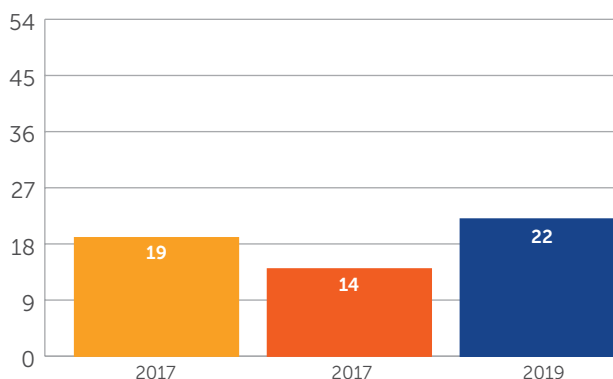
Blood Pressure Control

Number of Practices Achieving 4-Star Target



Diabetes Control

Number of Practices Achieving 4-Star Target



Best Practice Tactics for Metric Improvement

In providing practices with transparent quarterly data via the NHC Quality Dashboard, practices identified metrics to focus on for improvement. The Transformation Team assists practices to trend data and implement improvement tactics that can be applied across metrics. PCMH practices routinely perform the following:

- **Population Health:** Utilize the EMR, data repositories, and payer reports to identify patients with care gaps and to ensure care gaps completion. Conduct outreach to patients overdue for testing/screening.

- **Process Improvement / Standardized Workflows:** Practices identify optimal workflows to achieve efficiencies for addressing care gaps.
- **Patient Engagement:** Outreach to patients to have an annual wellness visit to engage the patient regarding the importance of preventive screenings, and have a shared-decision making discussion on plan of care.
- **Care Coordination:** Schedule the patient for testing (mammograms, colonoscopies, retinal eye exams) before leaving the office, and ensure that the patient completed the testing and results are present in the EMR.
- **Care Management:** Refer patients to a care manager as appropriate to engage the patient in chronic disease management and care navigation.
- **Team-based Quality Improvement:** Discuss quality data from multiple sources (payer reports, internal trended data, NHC Dashboard, etc.). Review clinical quality data with staff, discuss challenges and test improvement ideas. Create a bulletin board to display care team goals and progress. Celebrate successes; identify plans for improvement and incentivize internal competition to improve.

These best practices were shared at the Advanced Primary Care Committee meetings and many of the practices instituted them at their sites.

Metric-driven Best Practice Stories

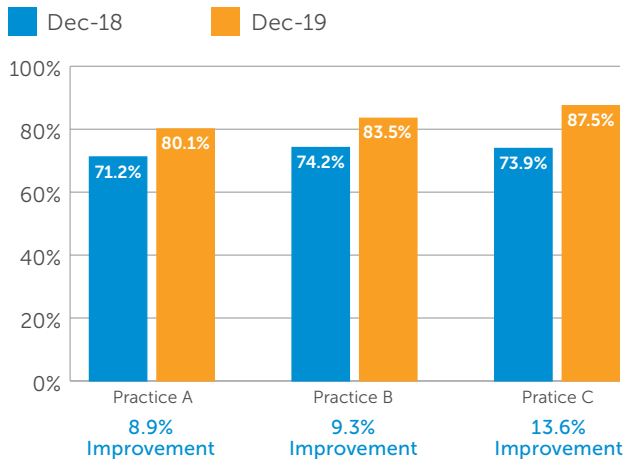
Tactics Common to Successful Outcomes:

Hypertensive Patients: To improve blood pressure control in their patient population, successful practices did the following:

- **Proper Measurement:** Trained staff on proper blood pressure measurement; confirmed technique. Trained staff on proper recording of the best reading. Staff were held accountable for best practice workflows.
- **Visual Cues:** Provide laminated hearts as a visual cue to remind staff to re-check blood pressure before the patient leaves the office.
- **Timely Follow-up:** If blood pressure is elevated, schedule patient for follow-up nurse visit in 2-4 weeks for re-check and discuss lifestyle changes and self-management support.
- **Outreach:** To patients with elevated blood pressure who do not have a scheduled follow-up visit.

- **Care Management:** Refer patients to care manager and/or integrated behavioral health specialist as appropriate to assess psycho-social needs, and engage in chronic disease management with patient education, development of self-management plans, and health coaching.

Percentage of Improvement in Controlling High Blood Pressure

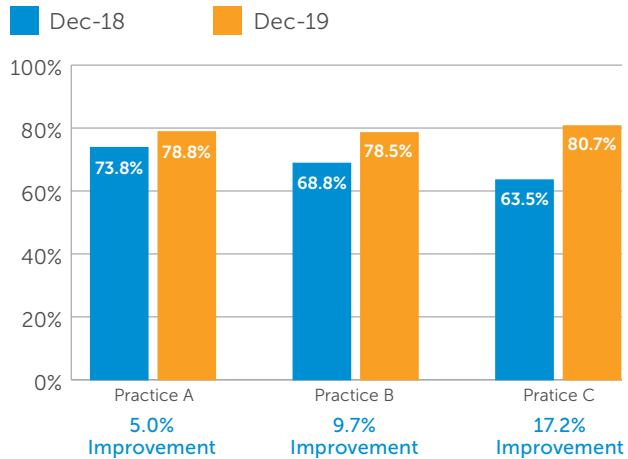


Spotlight of quality metric improvement for selected practices with significant success from December 2018 to December 2019.

Diabetic Patients: To improve diabetes control in their patient population, successful practices did the following:

- **Pre-visit Planning:** Conduct pre-visit planning, identifying care gaps including HgbA1c labs due.
- **Point of Care Lab Testing:** Draw HgbA1c test in the office. Staff enters results in the EMR and notifies provider and/or nurse.
- **Care Coordination:** QI/Referral coordinator and/or care team staff follow-up to obtain endocrine reports.
- **Outreach:** To patients with diabetes care gaps and/or without a follow-up visit scheduled.
- **Care Management:** Refer patients to care manager and/or integrated behavioral health specialist as appropriate to assess psycho-social needs, and engage in chronic disease management with patient education, development of self-management plans, and health coaching.
- **Touches Between Visits:** Nurse Practitioner or Care Manager contacts patients between visits for self-management support, medication adherence, and follow-up on care plans.

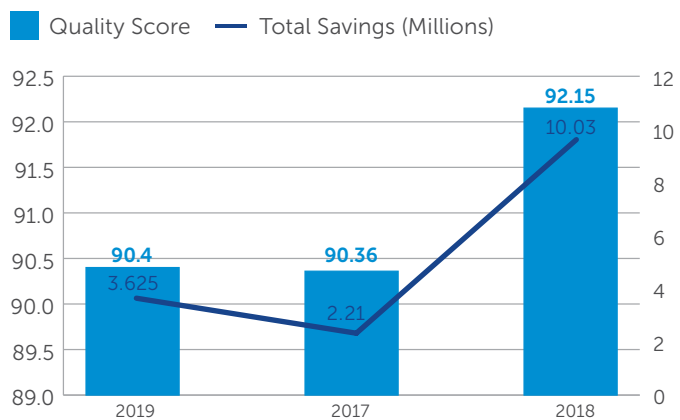
Percentage of Improvement in Diabetes Control



Spotlight of quality metric improvement for selected practices with significant success from December 2018 to December 2019.

Practice-level changes contributed to success in the Medicare Shared Savings Program (MSSP). Between 2016 to 2018, NHC quality score improved from 90.4 to 92.15. Over the same time period, NHC has realized cost savings exceeding 15 million dollars. 2019 data will not be available until Fall 2020. In 2020, NHC is working to provide additional data and information to support success in Medicare and Commercial value based payment arrangements.

NewHealth Collaborative MSSP Program



Environmental Services



The Summa Environmental Services (EVS) team works relentlessly to keep the hospital clean and sanitized. The team does quality work every day to provide a clean and safe environment for patients, visitors and fellow employees.

Environmental Services provides many critical services throughout the hospitals which include, cleaning and sanitizing patient rooms, common areas, clinical areas, waste removal, office cleaning, pest removal and much more. Our floor technicians work throughout the night to clean and refinish floors.

Our EVS team also provides words of encouragement to patients and their families while cleaning their rooms. The patients provide feedback for the team as well. One such example was for Debbie Mosley (pictured above). A patient commented, "Debbie is the kind of person I want to be. She comes in every day with a smile on her face and works hard to get her job not only done, but above and beyond the requirements."



Vicki Wheeler- EVS

Vicki Wheeler works on first shift in EVS cleaning throughout our hospital. Just a few of her responsibilities are cleaning the HUB, on-call rooms, doctor's lounges, and many other ancillary areas making certain our hospital is clean and sanitary for patients, visitors and fellow employees.

EVS Supervisors

Pictured are EVS Supervisors, Michael Whitestone, Layla Czirock and Heather Smith who are assembling the Surge Beds that are used for patient overflow in the event of a hospital emergency. Part of their day-to-day responsibilities besides managing their team include handling all pest control calls, monitoring waste removal and hospital moves.



Integrated Care Management

Integrated care management is an essential component to Summa Health's overall population health strategy. Fully integrated and coordinated care across the continuum is the key to increasing efficiencies, reducing waste, lowering cost and most importantly helping people live healthier lives. Today care management activities occur across all levels of care and weaving these together is key.

Our initial work began in 2018, as the discovery and planning phase for integrated care management that included gathering information during our kiazan event activities, also known as improvement events. During these sessions, we had more than 20 areas represented to focus on care management and care coordination initiatives for the system. We focused on mechanisms to allow Care Managers to see patient activities across levels of care, disease care management, referral needs, standard workflow, policy and procedural updates, documentation needs and reporting analytics.

In 2019, we moved into a design and implementation phase. Summa Health implemented a population health platform and began the integrated care management build that would soon be the foundation for long-term growth and success for our programs. The establishment of one documentation platform for Care Management activities is essential to support care integration across all level of care. Results of the integration work completed thus far include:

- **Care Management workflow** provide the ability to track patient outreach, define disease process needs, identify SDOH needs, complete assessments via documentation tools and platforms within EPIC and initiate care plan activities.
- **Risk stratification** methods based on disease state and utilization of services are accessible by care managers to identify patients with complex care needs who then outreach to patients who would benefit from care management services.

- **Timely Follow-up** is achieved through reports run daily that inform the care manager of recent hospitalizations or ED visits for the patients they are managing. Awareness of these visits allows the care manager to reach out to a patient shortly after discharge to ensure the patients' needs are addressed and follow up appointments are scheduled.
- **Outreach tracking** via Electronic Medical Record (EMR) enhancements allows for the tracking of each patient outreach and alerts the care manager of next scheduled outreach date.
- **Care Management Care Plan** capability within EPIC to track key initiatives surrounding tasks, education, patient stated goals and clinical care plan activities.
- **Data/Metrics Improved capability to run reports on patient data** are a result of the new workflows and other enhancements to the EMR. These reports provide us with data related to patient outreach, productivity, referral management, disease registries and patient outcomes.

Care Managers identify and engage patients to be concerned about their own health and then navigate them through the system to help them change their behaviors and achieve their goals. They do this through a holistic approach considering a patients physical, mental, social, and spiritual aspects in the context of a their environment. They coordinate care across providers and sites of care and collaborate with other professionals and community organizations. A single integrated care management platform is vital to carry out this work and to meet the population health needs of the community. Summa Health continues to make advancements to meet this goal.

IT&S Clinical Systems Training Team

In 2019, the IT&S Clinical Systems team reorganized and developed a dedicated Epic Training Team in order to specialize and enhance Epic training.

The team includes six training professionals and a manager. The primary focus is onboarding classes for most of our incoming staff and providers, both inpatient and ambulatory staff. The team also works with our Bon Secours Mercy Health partners to develop training using a variety of education techniques when roles are expanded to include new Epic tasks. Some of the techniques are: slide presentations coupled with hands on experience, provider customization, set up of schedules and inpatient lists, and refresher training on demand.

The team also creates job aides for updated or additional Epic functionality. These job aides provide clear instructions with screen shots to enhance the end users' Epic experience.

One of the other programs that was developed by the training team in 2019 was the Provider to Provider (P2P) program. Providers from ambulatory practices volunteered or were selected to act as Peer Mentors for the other providers in the practice. The program makes use of provider power-users to support ambulatory employed physicians in EHR optimization and efficiency. They also assist with communication of new or updated functionality to the providers' peers. This dedicated group of providers generally meets monthly to review and discuss tips and tricks for improving provider efficiency in Epic so this can be shared with others.

The program began in November of 2019. Initially, the team was discussing techniques for the selected group of providers to work with other providers in the practice. In December, the team looked at Epic data that can be used to find specific areas of functionality that are consuming a lot of the providers' time so that can then become areas for the provider peers to work with their colleagues to improve efficiencies. There has been positive feedback from both the P2P trainers and the providers they work with. The providers have been very engaged and started making connections for collaboration after the first few sessions. One of the providers noted that this is a great way to disseminate information related to advance skills in Epic.

**"It has made a huge
difference in our practice."**

The training team has had much success with both of these programs and continues to evolve as the training is strengthened based on feedback, new training techniques and changes in Epic.



Performance Solutions

The Lean Six Sigma (LSS) approach to quality improvement has three layers:

- 1) Tools and techniques: A comprehensive set of tools and analytical techniques that are used to identify and solve opportunities
- 2) Process and methodology: A series of phases that results robust root cause identification and solution implementation
- 3) Culture: A way of thinking based on a blameless culture and relies on data and processes to achieve high quality and continuous improvement

During the past year, Summa Health's Clinical Teams have been able to reinforce these three elements by completing **Green Belt Projects** and attending **various LSS training classes**.

Lean Six Sigma Training

In 2019, Performance Solutions provided in total **21** Lean Six Sigma training classes including twelve Yellow Belt, four Green Belt, four Declutter Life and 5S+1 sessions and one Executive Leadership Sponsor Class. A total of 393 students attended these classes and 117 of them successfully received various types of belt certifications based on their projects and tool utilizations.



Green Belt Project: Oncology Financial Navigation: Proactive Approach

A Lean Six Sigma Project identified the opportunities within Summa Health Cancer Institute to provide more robust and proactive knowledge around patient financial advocacy. By working individually with identified patients to explore all financial outlets, the project resulted in a huge reduction of charity care and increased patient satisfaction.



Green Belt Project-Improving Star Measure: Osteoporosis Management in Women (OMW)

The Lean Six Sigma Project Team at SummaCare showed a significant success by moving the Osteoporosis Management in Women (OMW) quality measure from a 1 star to a 3 star despite the changes in the cut points.

Osteoporosis is a condition where bone strength weakens, increasing risk for fractures. More than 3 million people in the United States are diagnosed each year. Treatment can help manage bone loss and decrease risk of fractures. To be compliant with this measure the patient must receive care within six months of a fracture.

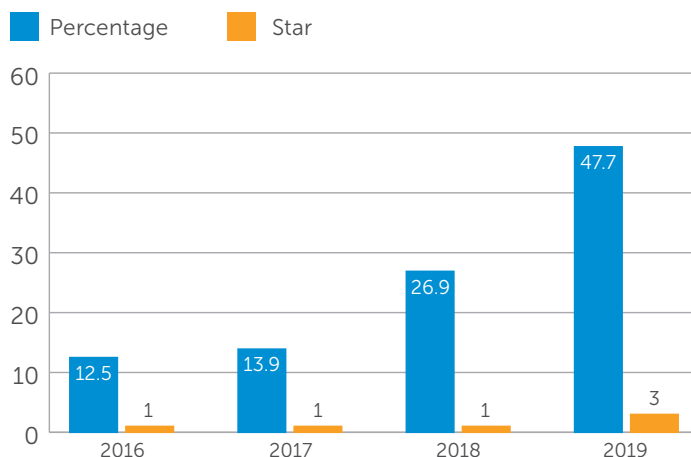
After addressing multiple root causes of the patient barriers to OMW treatment six months following fracture by implementing LSS tools, this quality measure performed 3 stars (47.7% of eligible patients met the measure requirement) in 2019.

Green Belt Project: Implement a Depression Screening Protocol in a Level I Trauma Center

Within the American College of Surgeon's (ACS) Trauma Quality Improvement Program (TQIP) guidelines, there are recommendations to complete depression screenings; there was no process to screen for depression for patients admitted to the trauma service in 2018.

A LSS Project at Summa Health System – Akron Campus resulted in designing and implementing a process that screens patients admitted to the trauma service for depression in 2019. The project team selected and implemented the Patient Health Questionnaire (PHQ2/PHQ9) screening tool after assessing all available screening tools and incorporated into electronic medical record documentation. Read more details on page 5.

OMW Treatment Percentage and Star Rating



Green Belt Project: Providing Follow-up Care when Virtual Visits are not Appropriate

In 2019, a project team looked for opportunities to improve access and patient experience through virtual visit options. One major improvement implemented by this team was to connect the patient with care coordinator from Clinical Access Center to provide follow up care after virtual visit protocol completed. This project intervention showed the great success of connecting the existing care resources with technology and yielded a great patient experience.

Institutes and Service Lines

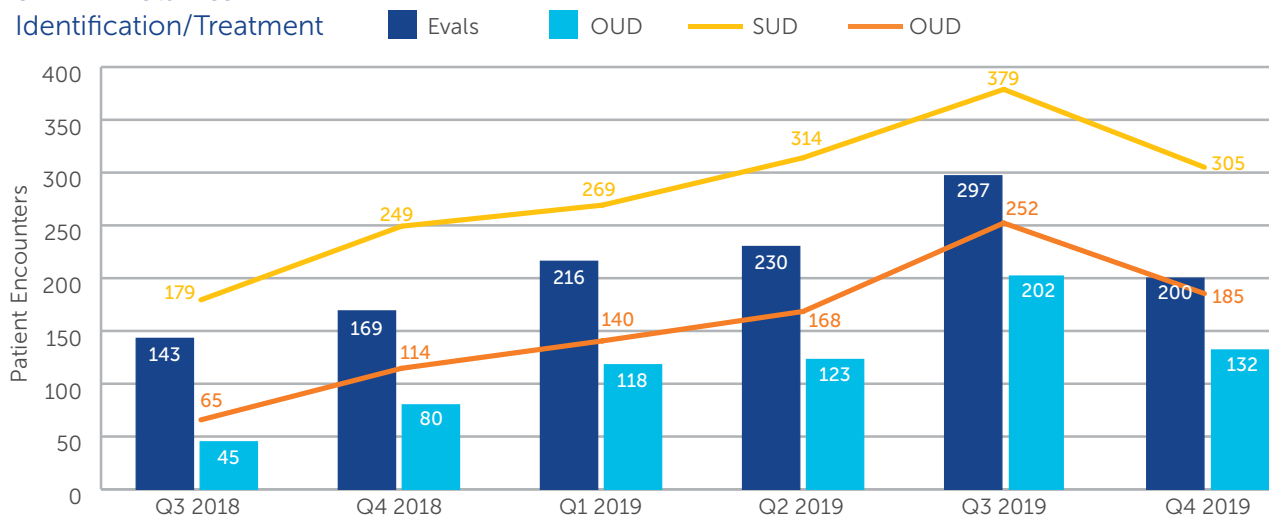
Summa Health Behavioral Health Institute

Expansion of "First Step" to the Summa Health System – Akron Campus ED

In February 2018, Summa Health System launched an innovative addiction medicine program at the Barberton Campus Emergency Department. The program was strategically designed in response to the opioid epidemic and the common barriers patients with Opioid Use Disorder (OUD) face when attempting to receive treatment: lack of access, navigation and support. By initiating the program in the emergency room setting, patients with addictions can receive treatment 24/7. The ED deploys an Addiction Care Coordinator (ACC) 12 hours a day, seven days a week to provide compassionate nursing care for the Substance Use Disorder (SUD) patients as well as care coordination for all addiction, psychiatric and medical needs. Peer recovery coaches are on call 24/7 to engage and provide support to the SUD patient after discharge from the hospital.

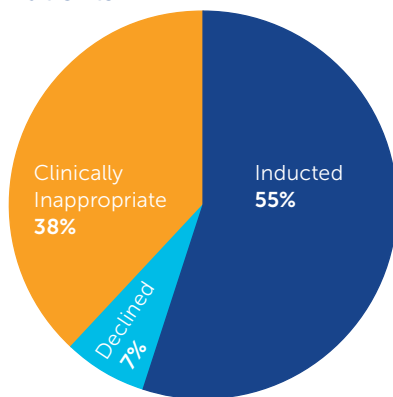
SBH ED Volumes

Identification/Treatment



Notes re: Q4 decline: 1. Overall ED volumes declined 2. ACC vacancy

Barberton Campus MAT Induction - All SUD Patients



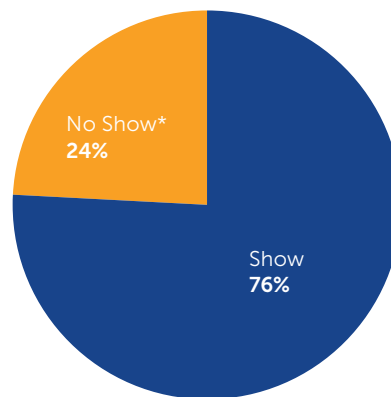
OUD Patients Only:

81% of Barberton ED SUD visits were for OUD (1032)

77% of OUD patients clinically qualified (788)

Of those who clinically qualified - 89% inducted and 11% declined

Barberton Follow-up MAT Appointment

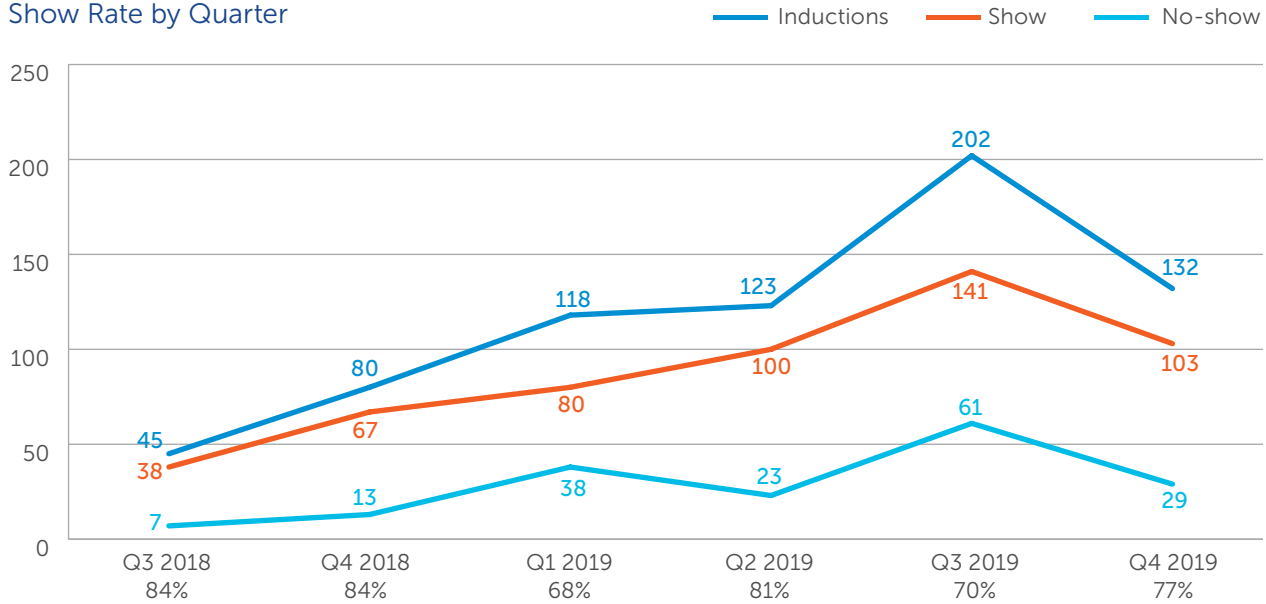


*No Show rate includes patients that did not complete the induction process in the ED

Attendance rates for initial appointments in substance abuse facilities range from 33% to 52% (Festinger et al. 1996, Festinger et al. 2002, Blow et al. 2010)

Barberton Trends - Induction and Follow-up

Show Rate by Quarter



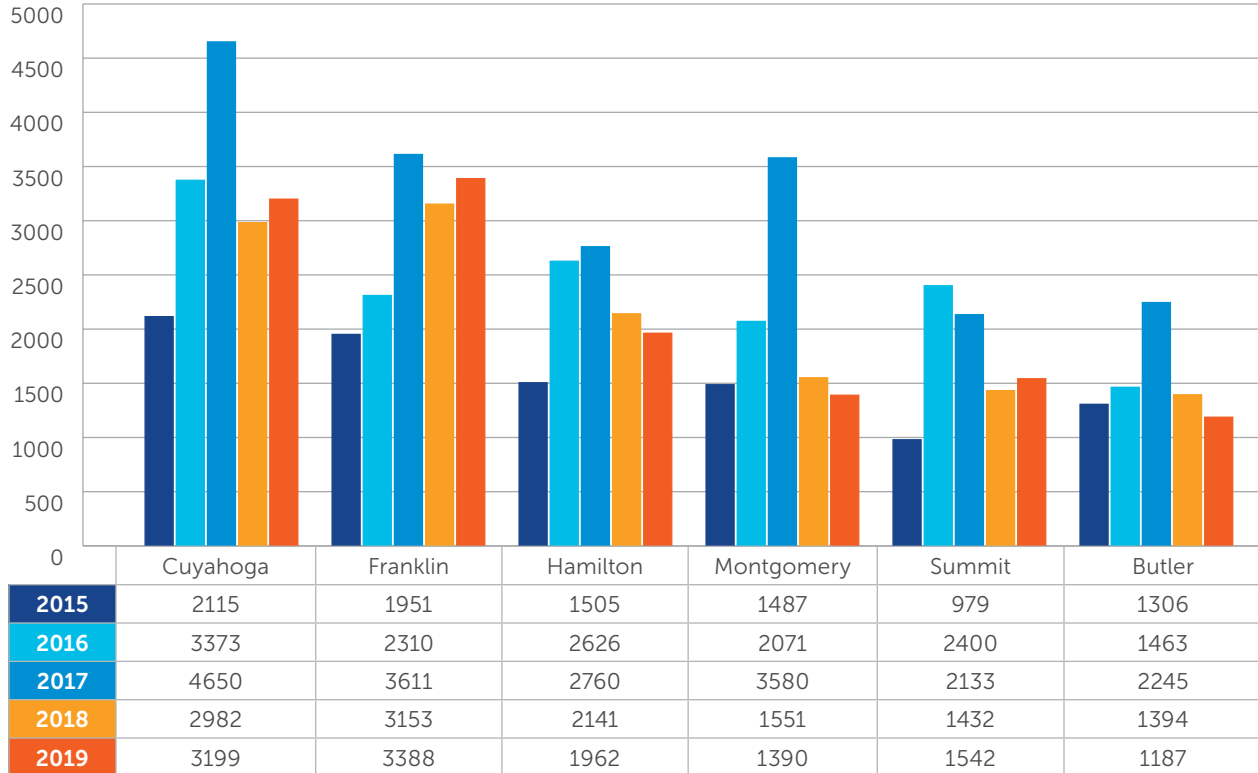
Notes:

Q1 - 2019: Experienced an increase in No Shows related to weather

Q3 - 2019: Experienced a decrease in access related to waived providers in the community for follow-up appointments.

Ohio Drug Overdoses, 2015-2019

Ohio Drug OD's - Top 6 Counties



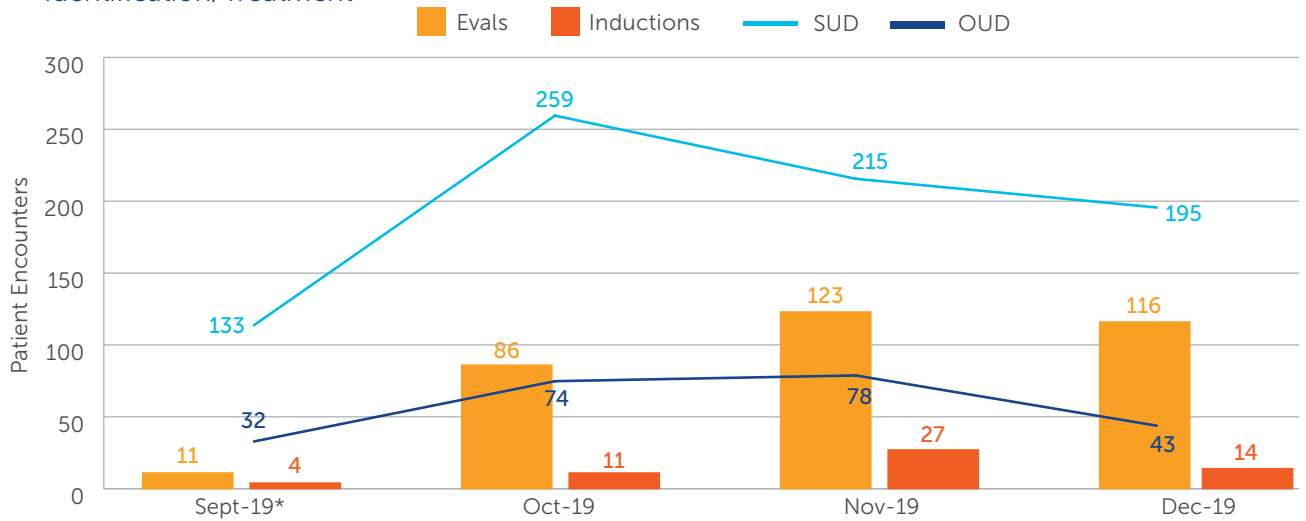
In 2018, Ohio had made a significant impact on the number of drug overdoses. Unfortunately, the exposure of fentanyl in other illicit substances such as cocaine and methamphetamines resulted in an increase of overdoses across the state. With the support of community partners including the United Way of Summit County, it was decided to expand the addiction program.

First Step began offering its continuum of services at the Akron Campus Emergency Department in September 2019, and the expanded program wasted no time in demonstrating its value to the community. Individuals suffering from substance-use issues now have unparalleled 24/7 access to specialized addiction treatment and can seek help when they need it most.

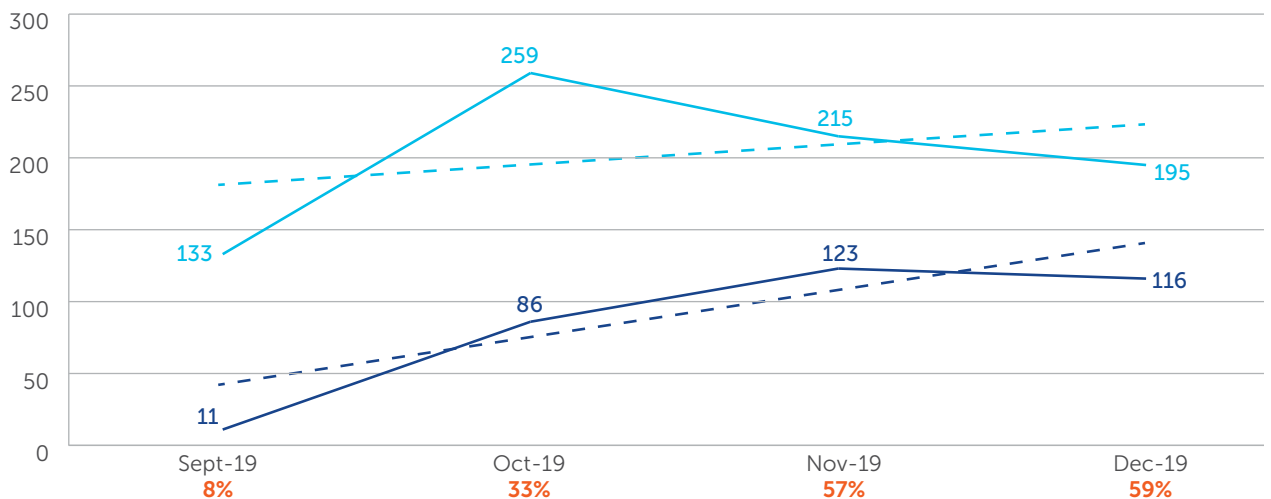
In 2019, 264 (60%) of the patients evaluated in the First Step Program at Akron Campus were addicted to opioids. Seventy-seven (43%) medically qualified and consented to medication-assisted treatment. The Akron Campus program had a 75% show rate for its follow-up appointments arranged by the ACC.

Summa Health System – Akron Campus ED Volumes

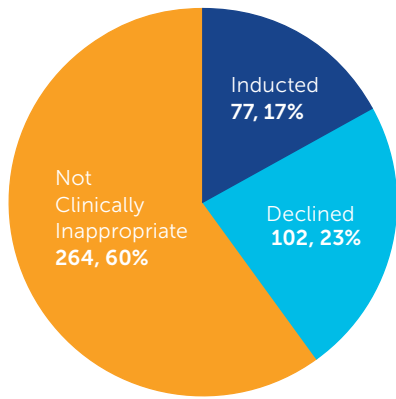
Identification/Treatment



RN ACC Evaluations



Akron MAT Induction - All SUD Patients

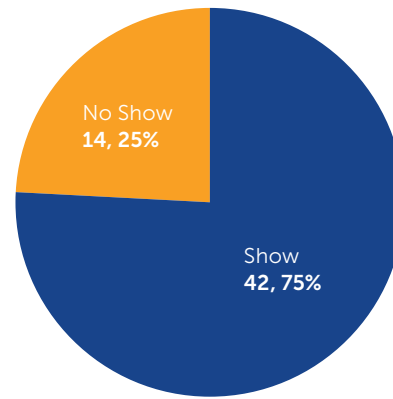


264 out of 443 pts (60%) evaluated were diagnosed with Opioid Use Disorder

179 (68%) of the OUD pts qualified for MAT

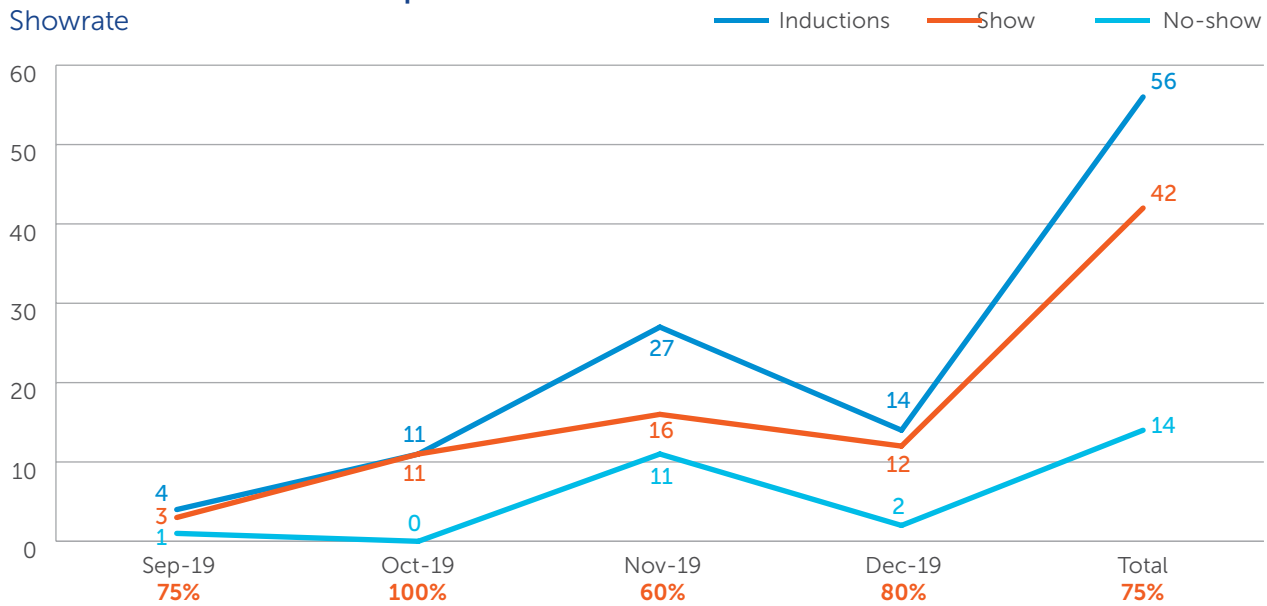
77 (43%) were inducted on buprenorphine and 57% declined for detox or counseling

Akron Follow-up MAT Appointment



Attendance rates for initial appointments in substance abuse facilities range from 33% to 52% (Festinger et al. 1996, Festinger et al. 2002, Blow et al. 2010)

Trends: Inductions & Follow-up Showrate



Summa Health Cancer Institute

Patient Financial Navigation Program

Working with cancer patients to identify resources to cover the significant costs of care through charity, grants or complex financial navigation has significant benefits for our patients and has shown improved outcomes via improved treatment compliance and decreased patient /family stress. A Lean Six Sigma Green Belt project was initiated and completed at the end of 2018, which identified the need for two additional Patient Financial Advocates in order to better serve the oncology patient population, as well as decrease the overall need for charity care among oncology patients.

With the implementation of the new Financial Advocates, the program was able to switch gears from a reactive approach to a more proactive approach to financial navigation. A proactive approach would allow the Financial Advocates to assess all newly diagnosed patients and identify those with a high potential for financial distress to begin the process of complex financial navigation - researching and assessing insurance coverage to move uninsured patients into coverage and under-insured patients into better or maximized coverage, as well as the utilization of local foundations, co-pay assistance, grant funding, etc., as appropriate, based on the patient's unique diagnosis and personal circumstances. This approach has the potential to save Summa Health, as well as the patient, a significant amount of money per year, by decreasing the overall need for charity care through HCAP and other Summa Health charity programs.

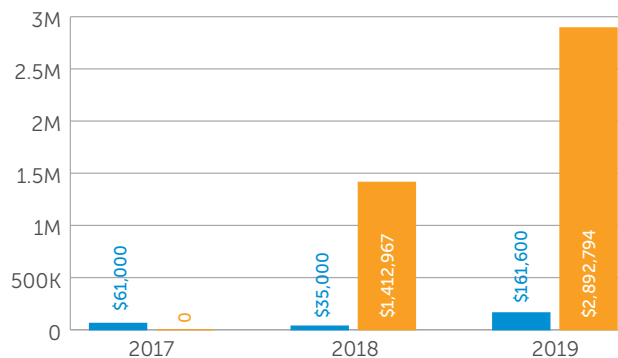
In 2019, the Summa Health Cancer Institute implemented a redesigned patient financial navigation program in order to better serve oncology patients who were already experiencing or at risk for financial distress. Expanding financial advocacy through developing a complex financial navigation process within the Summa Health Cancer institute has also benefited Summa Health's financial stability through improved CMS and commercial reimbursement - significantly reducing the amount of charity care needed. This new method of financial navigation capitalizes on the ability of the Financial Advocate to "maximize" the patient's current insurance and/or transition them into better coverage as appropriate.

Every patient fills out a distress screening form at their initial visit in oncology, whether it be with surgical, medical or radiation oncology. Among other things, the screening tool assesses for financial distress. Once a patient has been determined to be at risk for or currently experiencing financial distress, a referral is generated to the Financial Advocates. Once the Financial Advocates have been notified of the new patient, a thorough investigation of the patient's benefits, deductibles and unique needs is initiated in order for the Financial Advocate to provide a higher level of financial literacy to the patient. This allows the patient and the Financial Advocate to work together to make informed decisions about their plan of treatment as it relates to their financial health.

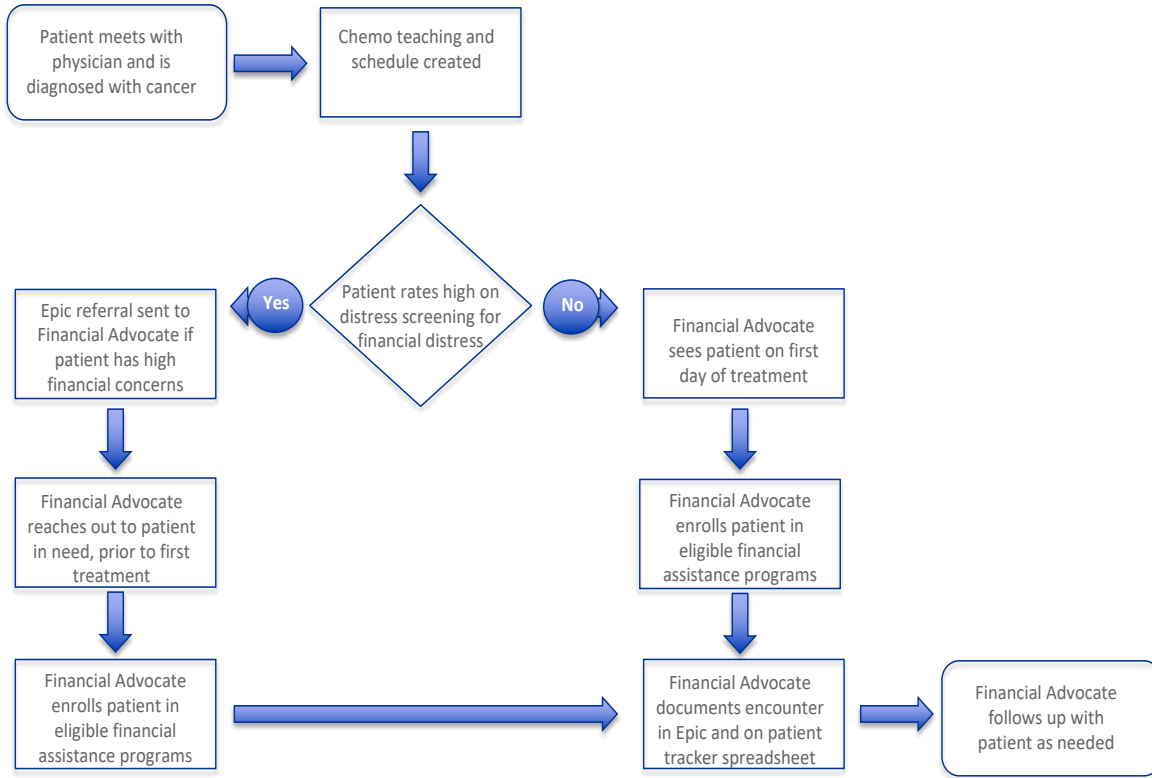
With this new method of financial navigation, we have been able to significantly decrease the patient's overall out of pocket costs by either maximization coverage, initiating other financial support resources or a combination of the two that is customized to each patient's unique diagnosis and financial needs. Additionally, through the implementation of insurance maximization for this patient population, we have been able to save millions of dollars for Summa Health by reducing the need for charity care. Once this program has been well established, it is something that can be successfully expanded into other service lines within Summa Health.

Cost Savings to Patients and Summa Health

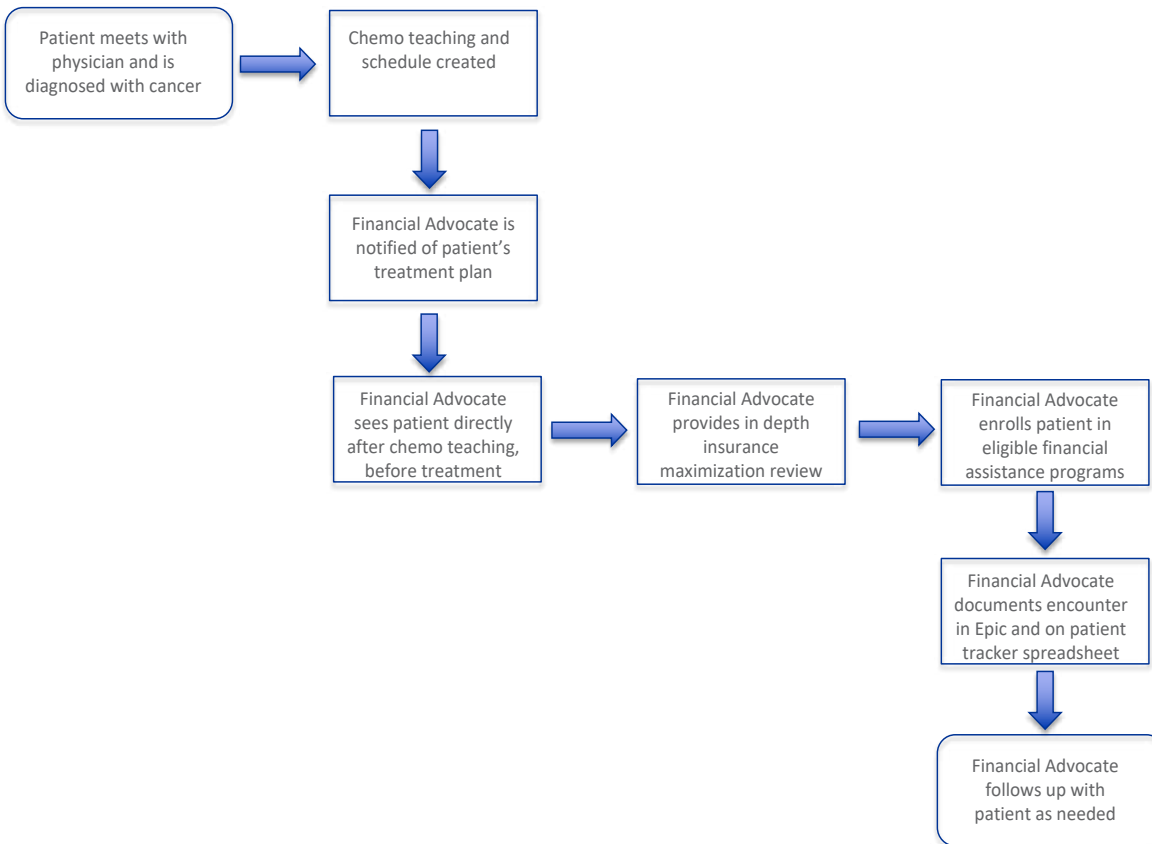
- Money Awarded through Foundations for OOP Costs
- Money Saved through Insurance Maximization



Process Map - Current State (reactive)



Process Map - Future State (proactive)



Brain Metastases



Melissa Smith
Cancer Registry



Oscar Streeter, M.D.
Radiation Oncology



Traci Muraco
Radiology

Not Pictured:

Kim Keener
Radiation Oncology

David Rosenblum, M.D.
Radiology

Brain metastases are tumors that spread to the brain from cancer that arises in another part of the body. Accurately identifying the number, location and size of brain metastases in cancer patients is important to determine appropriate interventions for the patient.

Before a patient undergoes radiation therapy for specific types of cancer, they undergo magnetic resonance imaging (MRI) of the brain, which is a painless, noninvasive test that produces detailed images of the brain and brain stem.

A radiation oncologist noticed that not all cancer patients undergoing an MRI were receiving the same resolution to identify the brain metastases. It was determined that there was a lack of physician awareness in needing to specify the desired MRI slice thickness while ordering the test and a lack of radiology's awareness for the need for smaller slice thickness in these patients.

Slice thickness of 1 mm was not being routinely used to accurately identify brain metastases in patients already diagnosed with cancer. The current radiology protocol was utilizing 5 mm slices. Some patients had to undergo a second MRI where additional metastases were identified due to the smaller 1 mm slices. This protocol with smaller 1 mm slices is called BrainLab.

A retrospective review of sixty-five patients with brain metastases treated with radiation was conducted to evaluate whether the current Brain Mets protocol (5 mm slices) was utilized for each patient. If an additional MRI was ordered that utilized 1 mm slices, there was a review to determine if there was a change in the radiation planning based on the findings in the additional MRI.

The review confirmed that the BrainLab protocol was only utilized by radiology if specifically requested as an additional study. Smaller brain metastases were found in two patients and radiation planning was changed based on the second MRI. It was determined from these findings that 1 mm slices must be implemented as a standard radiology protocol for cancer patients at Summa Health.

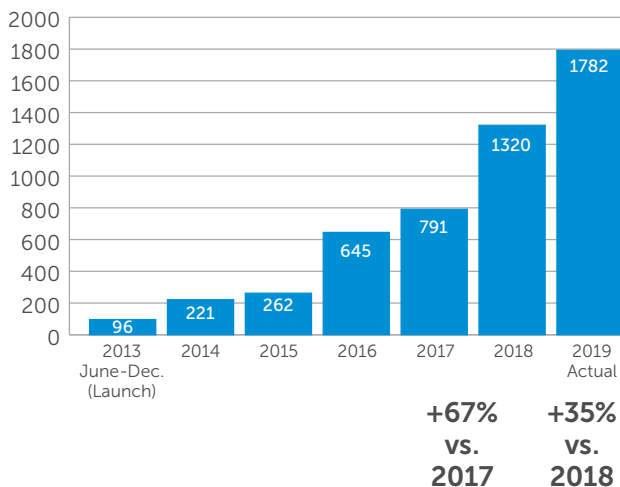
The new protocol was implemented at all Summa MRI facilities on August 23, 2019. All physician offices that order MRIs with a cancer diagnosis and radiology technologists were notified of the change.

Summa Lung Cancer Screening Program: Exponential Growth in Screening Rates, Expansion of Lung Nodule Clinics, Early Detection of Lung Cancer for Cure

Lung cancer is the leading cause of cancer death in the U.S, claiming more lives annually than either colorectal, pancreatic, breast or prostate cancer. This year, 228,820 Americans will be diagnosed with lung cancer 1. (American Cancer Society, Cancer Facts & Figures 2020. Atlanta: American Cancer Society; 2020 Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report). When lung cancer is diagnosed in stage III or IV, survival rate is approximately 15%. This is in contrast to a 90% survival rate for those diagnosed at stage I. Lung cancer screening offers the opportunity to diagnose lung cancer at an early, curable stage.

In 2011, the National Lung Cancer Screening Trial demonstrated a 20% relative reduction in death from lung cancer with the use of lung cancer screening CT. This trial prompted the approval of low dose CT scans for lung cancer screening, and in 2013 Summa Health began low dose CT screenings. Lung cancer screening is available for patients at risk but asymptomatic for lung cancer, specifically those age 55-77 who are current or former smokers with history of smoking 30-pack years or more. Lung cancer screening must be ordered by a healthcare provider.

Lung Screening Program # Lung Screenings/Year: 2016 Launch to 2019 (Total # Screens Per Year)



In 2013, Summa completed 96 low dose CT lung screenings after launching a new lung screening program in June, and diagnosed four cases of lung cancer in the first 12 months. Since then, the lung screening program has grown exponentially, reaching 1,782 screenings and diagnosing 36 cases of lung cancer plus three other types of cancer in 2019.

Multidisciplinary Review, Navigation and Lung Nodule Clinic



“To build a strong lung cancer screening program and deliver high quality, seamless care for at-risk patients, we engaged a team of specialists from radiology, pulmonology, thoracic surgery, medical oncology, radiation oncology, pathology, navigation and analytics.”

Brian Bauman, M.D.

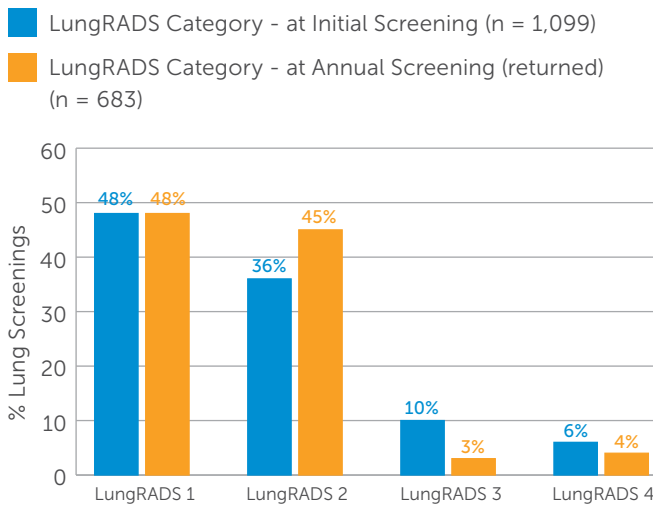
Medical Director of The Lung Nodule Program and the newly formed pulmonary service line

To build a strong lung cancer screening program and deliver high quality, seamless care for at-risk patients, the lung screening program engaged a team of specialists from radiology, pulmonology, thoracic surgery, medical oncology, radiation oncology, pathology, navigation and analytics. They also built a broad base of support with primary care physicians to develop appropriate and timely lung cancer screening referrals for high risk patients. Currently, Summa has three dedicated Lung Nodule Clinics located in Akron, Barberton and Medina. These clinics are comprised of a dedicated team of pulmonary specialists and navigators and include smoking cessation services. Every year since 2016, Summa Health has been awarded the “Lung Cancer Screening Center of Excellence” award by the Lung Cancer Screening Alliance (now the GO2 Foundation for Lung Cancer).

When a lung screening is ordered, schedulers ask patients a series of questions regarding smoking history to ensure eligibility per CMS. Screening is completed with a low dose CT scan to limit radiation exposure.

The American College of Radiology Lung Cancer Screening Committee subgroup on Lung RADS has produced the **Lung Imaging Reporting and Data System (Lung-RADS)** as a quality assurance guide. The way that Lung-RADS ensures CT reporting 'quality' is by standardizing CT image reporting in lung screening and standardizing patient clinical management recommendations. Radiologists classify the CT findings as Category 1-4 based on nodule size to quantify the lung cancer risk, and the results are sent to the Summa Lung Navigator who then coordinates the patient follow-up with their ordering provider based on the category. High-risk Lung-RADS category 4 patients, with lung nodules of 8 mm or greater, receive expedited referrals to the dedicated Lung Nodule Clinic.

Low Dose Lung Screenings 2019
LungRAD Findings - at Initial vs. Annual Screenings
 (% Cases)



Each Lung-RADS category 4 finding is reviewed in a multidisciplinary conference involving radiology and pulmonology. Patients undergoing biopsy are reviewed prospectively in a larger multidisciplinary conference which includes participants from radiology, pulmonology, thoracic surgery, medical and radiation oncology, pathology and navigators. Treatment options are discussed prior to invasive testing. In 2019, there were 91 patients with Lung Rads 4 findings. All cases were reviewed at least once in a multidisciplinary conference and all received navigation to coordinate follow-up. Seventy-eight of those patients (86%) were seen in the Lung Nodule Clinic. The remaining cases received follow-up through already established pulmonary providers or through their primary care physician. A multidisciplinary review is a best-practice approach which avoids unnecessary procedures and ensures appropriate treatment.

Lung-RADS categories 1-3 patients may have follow-up diagnostic imaging and are placed in ongoing surveillance screenings. Data shows the highest incidence of Lung-RADS 3-4 cases at initial screenings which has led to earlier stage cancer diagnosis.

Summa offers a number of advanced techniques for lung biopsy including options for navigational bronchoscopy (lung GPS technology), endobronchial ultrasound, CT guided transthoracic approaches, and Video Assisted Thoracic Surgery (VATS) techniques. Individualized and optimal biopsy technique is determined through our multidisciplinary conference. After biopsy, further multidisciplinary review occurs and patients receive personalized and coordinated referrals for definitive treatment. Those with biopsies which are negative for cancer receive ongoing surveillance in the Lung Nodule Clinic. Patients and primary care providers are kept closely informed and involved throughout this process.



Rami Abboud, M.D.; Laura Musarra, MBA; Brian Bauman, M.D.; Masroor Mustafa, M.D.; Eric Espinal, M.D.; Sandy Kohut, RRT; Jonathan Sugano, M.D.; Tammy Smithson, APRN-CNP



Screening Center of Excellence (SCOE) designation recognizes medical facilities that provide responsible, high quality low-dose CT screening for early detection of lung cancer and comply with comprehensive standards based on best practices.

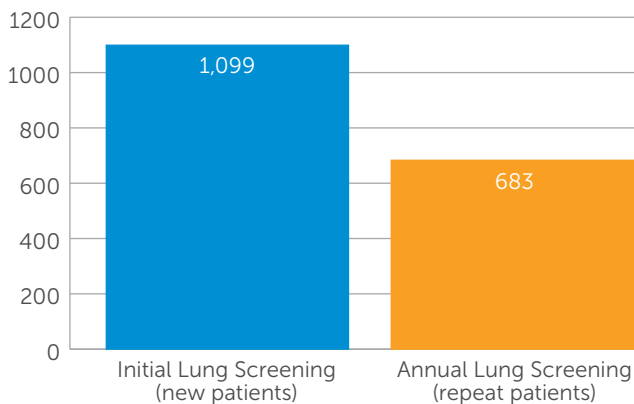
2019 Outcomes

In 2019, the program experienced its most significant growth reaching 1,782 lung screenings for a 35% increase compared to 2018. Of these lung screenings, 62% were first time screening patients demonstrating continued education and outreach to patients and referring physicians.

The program diagnosed 36 lung cancers with the majority or 81% of cases diagnosed at a patient's initial screening. **Most importantly, the program solidified impressive progress in stage migration with increased early stage lung cancer diagnosis with 64% of cases diagnosed at Stage 1 for screening patients compared to 28% for non-screening patient.** Early stage diagnosis leads to improved clinical outcomes and reduced scope and cost of care for our patients and the community.

Lung Screenings in 2019

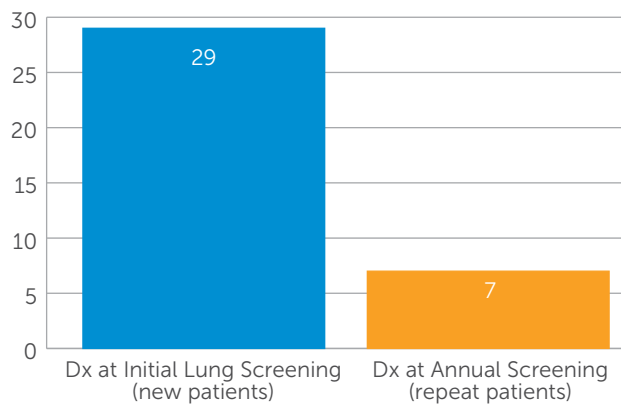
Initial vs. Annual Screening



62% of 1,782 lung screening in 2019 were for initial screenings (new screening patients).

Lung Cancer Diagnosed in 2019

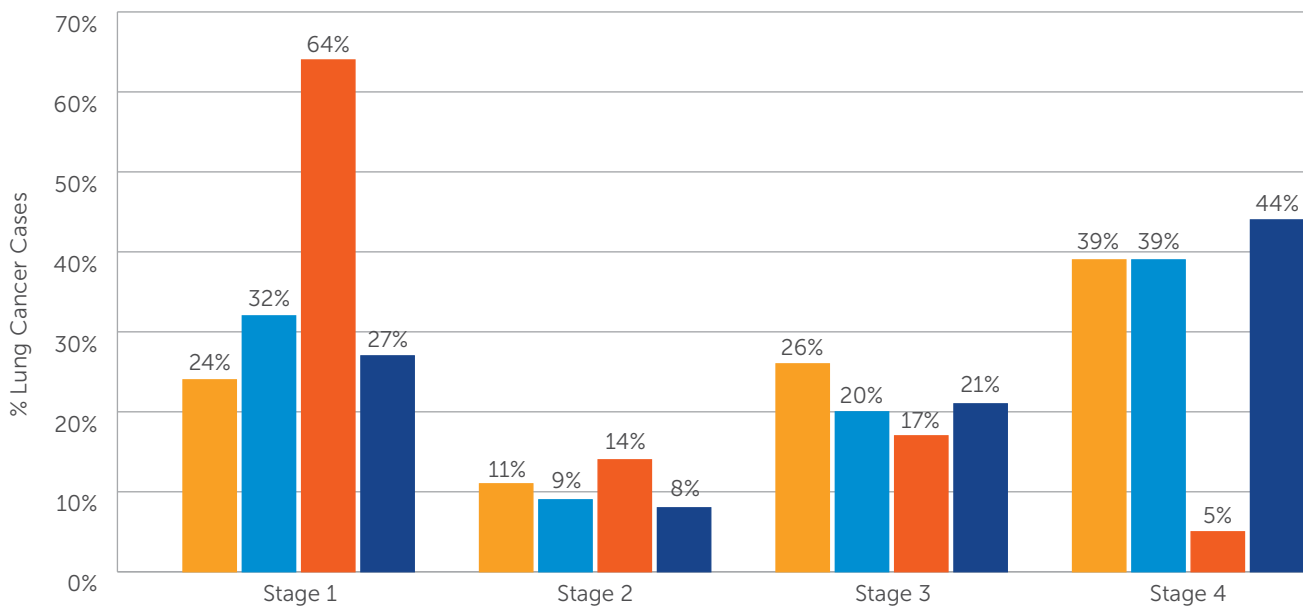
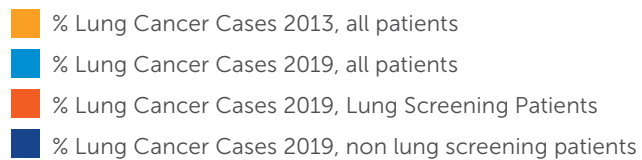
Identified through Lung Screening at Initial vs. Annual Screening



81% or 29 of 36 lung cancers diagnosed through lung screenings in 2019 were diagnosed at initial screenings (new screening patients).

Lung Cancer Cases by Stage - Improved through Screening

Pre-screening Program (2013) vs. Lung Screening Program (2019)
(% Cases by Stage)



Summa Health Dental Clinic

Give Kids a Smile Program

The Summa Health Dental Center located on the third floor at 75 Arch Street houses Summa's Dental residency program and offers a wide variety of dental care to the surrounding community. A large portion of the patient population is under-insured, self-pay, or on a Medicaid product insurance. As many private dental practices do not accept Medicaid products or offer accommodating payment options, many patients in our community do not have access to dental care outside of Summa's Dental Center.

Our dental residents and staff participate in community outreach programs to help the patient population better understand the importance of oral hygiene. We participate in patient centering with the Women's Health Center and participate annually in a program for youth called GIVE KIDS A SMILE (GKAS).

Sponsored by the American Dental Association, GKAS Day takes place on the first Friday in February each year. Dentists across the country as well as volunteers give their time to provide the underserved children in their areas with information on oral hygiene and provide free screenings to the children. The first GKAS event was in 2002. Summa Health Dental Center has been a proud participant since 2009.

Each year, the Dental Center partners with a local elementary school to accommodate two groups of children in 1st through 4th grades. During their time at the Center, the staff plays games with them, engages in interactive projects that help the children learn about hygiene (for example, how to properly floss), and completes their screenings and fluoride treatments. If further care is needed, a referral slip with recommendations is sent home to the child's parent. Each child is also provided a care package including the tools necessary to continue what they have learned about flossing, brushing and rinsing.

Since 2003, more than half a million volunteers have cared for more than 6 million children through GKAS. On average, Summa sees 65 kids a year – that's a lot of smiles!

It is our plan to continue participation in this event for many years furthering our impact in the community.





ADA Foundation®

Summa Health Heart & Vascular Institute

Overall Institute 2019 Achievements

- Began coordinating and assisting for March 2020 Re-Accreditation for Heart Failure with the American College of Cardiology
- Assisted in the development of a guideline directed care pathway towards improving cardiac device implantation screenings
- Led the development of a Heart Failure Staff Pathway to ensure guideline directed HF therapy is followed by staff at Summa Health
- Continued the team approach of holding monthly process improvement and bi-monthly 30-day readmission reduction HF Team meetings

Cardiothoracic Surgery - Collaboration across the Care Continuum

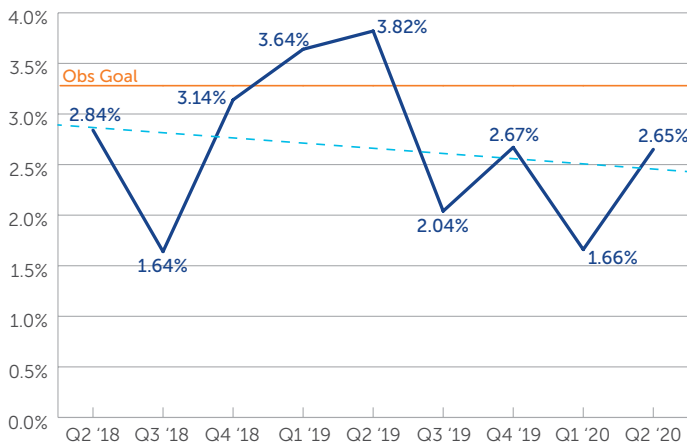
The care of a patient after open heart surgery doesn't stop at discharge. While the majority of patients are discharged home after heart surgery, those who require some additional rehabilitation after surgery might benefit from a host of options: at home therapy, formal rehabilitation or skilled care.

The goal for post-acute care should be to advance the health and function of the patient, and return them to, and maybe even improve upon their pre-surgical status in the shortest time possible. After reviewing cases where we fell short of this goal, the surgical team collaborated with one of our Skilled Nursing Facility partners as well as our homecare partners, to address potential areas of improvement. The relationship between the inpatient team and the post-acute team has blossomed, and the patients have reaped all of the benefits.

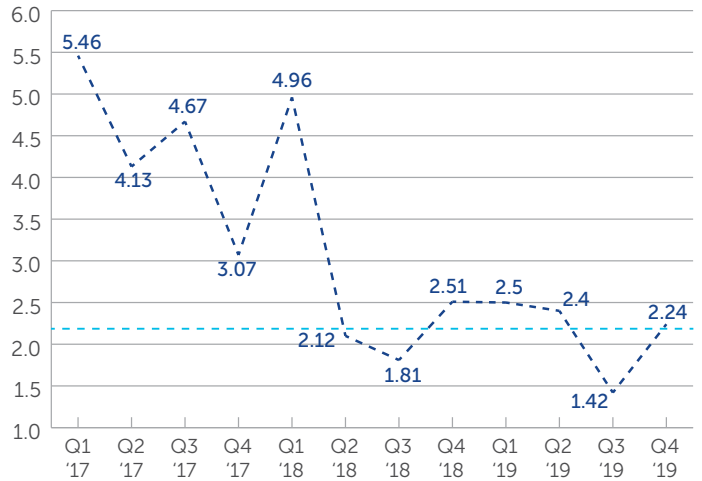
After implementing the improved relationship, the length of stay for patients going to skilled facilities after bypass surgery decreased by five days, and readmissions in the 90 days following discharge decreased by 26%.

Percutaneous Coronary Intervention/Invasive Cardiology

Observed Bleeds



Risk-Standardized Bleeds (NCDR)

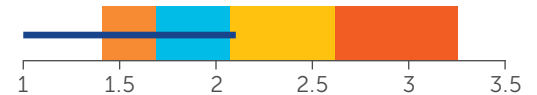


Type of Bleed by Access Site (Q2 2018-Q2 2020)

Arterial Access Site	Type of Bleed	Episode Date		
		2018	2019	2020
Femoral	4 Gram Drop		3	1
	Access Site Bleed		2	2
	GI Bleed		3	
	Hematoma	3	1	
	Other Bleed		2	1
	Retroperitoneal Bleed		1	2
	Transfusion	1	4	2
Radial	4 Gram Drop	3	3	
	Access Site Bleed		1	2
	GI Bleed		5	1
	Hematoma	1	1	
	Hemorrhagic Bleed	1		1
	Other Bleed		1	4
	Tamponade		1	
	Transfusion	4	7	1

2.15

My Hospital R4Q Performance



10th	25th	50th	75th	90th
3.24	2.64	2.12	1.73	1.44

US Hospital R4Q Performance Distribution for 2019Q4

Vascular Surgery

The Noninvasive Vascular Services department has been accredited for over 25 years, and was awarded recertification this year in all four areas of excellence: Arterial, Cerebrovascular, Venous and Visceral. This accreditation now encompasses the system facilities including the two main hospitals, Akron and Barberton, and four regional testing medical centers. The process emphasizes our high quality technical imaging and standard care across the system. We monitor technical quality and reporting accuracy and completeness monthly and moved three of the four metrics to 100% accuracy by the end of 2019. All staff performing this modality across the system are certified, holding a specific credential for vascular testing.

Summa Health's Elective Carotid Endarterectomy length of stay (LOS) is one of the lowest in the Great Lakes region. We have consistently placed in the top 15th percentile for length of stay.

Summa Health average LOS is 1.4 days. This is one day less than the Regional and National averages of 2.6 days.

Heart Failure

Summa Health System — Akron Campus serves a significant number of patients with Heart Failure (HF) within the system's surrounding communities. In 2019, the HF Readmission Multidisciplinary Team (social workers, nurses, nurse navigator, nurse practitioners, general cardiologists, heart failure physicians and administration staff) focused on patients with multiple HF readmissions to improve patient care, patient adherence and patient outcomes.

One of our clinical initiatives for HF patients continues to be working to decrease repeat hospital visits and improve their quality of life. Summa's Akron Campus 30-Day HF Readmission Rate decreased significantly across 2019 (Fig. 1) to about 16%. The Heart Failure Team created a pathway standardizing admission orders, medications, HF consultation and follow-up. Also, we expanded our HF Outpatient Clinic, the remote monitoring system, such as Cardiomems system (Fig. 2), to better care for and manage our patients with HF in ambulatory settings. A team of HF nurse practitioners and heart failure physicians developed a standardized approach to help manage these patients at home. Patient who were adherent with Cardiomems readings had a 73% reduction in HF readmission rates in 2019 (Fig.2). We look forward to continued improvement in our HF care with the implementation of a system-wide HF Care Pathway in 2020.

Fig. 1 Heart Failure 30-Day All Cause Readmissions
Summa Health System - Akron Campus

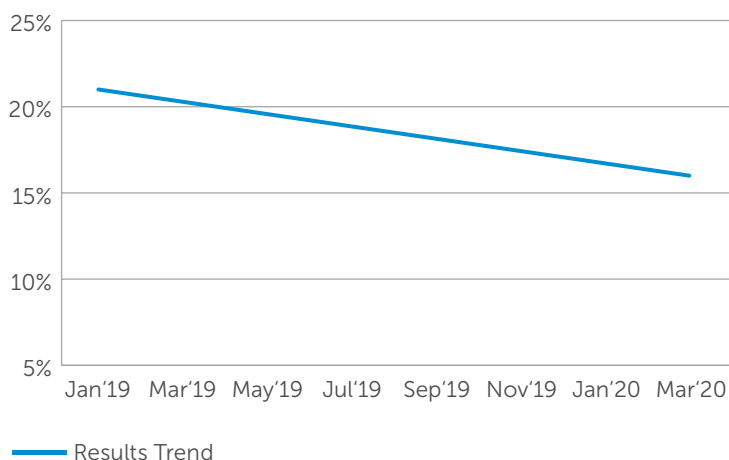
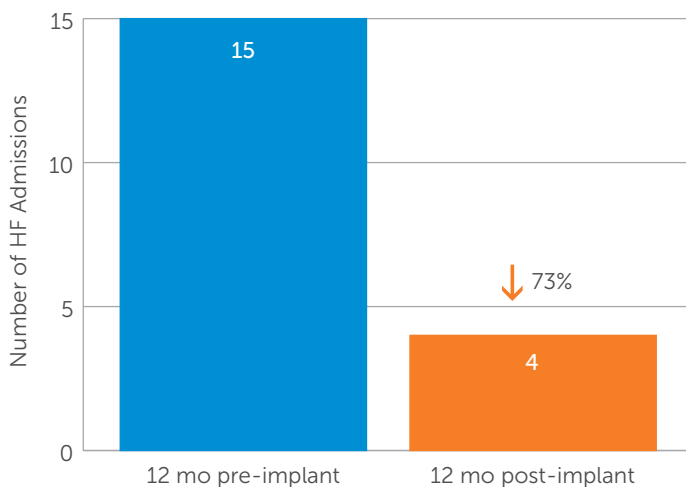


Fig. 2 Heart Failure Patients Using the Wireless HF Remote Monitor (Cardiomems System) 2019



Care Coordination for Heart Failure Patients

Summa Health is a leader in Northeast Ohio for Heart Failure (HF) patient care. A need was identified to develop a more robust HF patient education program and to also provide strategic follow-up patient care. The Summa Health Heart and Vascular Institute (SHHVI) created a HF RN Patient Navigator role to better meet the needs of patients with this complicated diagnosis. Bridget Hilker joined the Summa Cardiovascular Quality Department in June 2019 as a perfect fit with a strong background in Heart Failure, Electrophysiology and Telemetry Medical Surgical Nursing.



Bridget Hilker, BSN, RN, PCCN

Working collaboratively with a multidisciplinary team to care for her patients, Bridget offers patient and family members education, support and guidance in the self-care of HF. She feels no patient or care provider should stand alone in treating and managing this diagnosis and coordinates care with physicians, nurses and transitional care coordinators (TCCs). This multidisciplinary team approach in providing effective care helps patients and families make educated decisions for their health. For patient education improvement, a Care Pathway tool

was implemented and posted in ACH 5 West HF patient rooms. This unit poster describes guideline directed points of what the patient can expect daily during their hospital stay. Bridget and the nursing staff use this tool to help the patient and family understand their HF care daily and assists in alleviating any fears of not knowing what to anticipate next. The evaluation of utilizing the HF Care Pathway tool led to higher patient satisfaction scores with nursing communication and comprehension of HF self-care.

TAVR

The Summa Heart Valve Team was selected as one of seven sites in the United States to participate in a pilot study program optimizing all components of trans femoral TAVR care. The program included a streamlined peri-procedural approach, post procedure accelerated reconditioning, and criteria driven discharge. Subsequently, the following occurred:

- 97% of cases converted from heavy modified anesthesia care to conscious sedation
- Procedural time was reduced by 32 minutes per case
- Average ICU hours were reduced by 13 hours
- Average length of stay was reduced by one day
- 82% of patients were discharged home on post op day 1

There was no increase in cardiovascular readmission, mortality, stroke, vascular complications, or permanent pacemaker implantation during our study.

Internal Medicine/Family Medicine

Family Medicine Center of Akron- Multidisciplinary Care Team

Young adults with chronic childhood-onset conditions (i.e. Muscular Dystrophy, degenerative neurological conditions, cerebral palsy) deal with unique and complex healthcare needs on a daily basis. Between the ages of 21-26 years these individuals age out of the pediatric healthcare setting and need to transition care to an adult healthcare provider. For individuals who have received healthcare at the same place for the entirety of their lives, this transition can be both frightening and overwhelming. Failure to transition related to fear or inability to find an appropriate adult care provider can lead to healthcare gaps that can be harmful to patients with complex healthcare needs. In 2019 the Family Medicine Center (FMC) of Akron developed an innovative Complex Care team in order to provide a welcoming Medical Home for this population.

The FMC is an outpatient clinic for a family medicine residency program at Summa Health, Akron Campus. Providers at this clinic provide healthcare to patients of all ages and complexities. At the FMC we strive to provide healthcare that is accessible, family-centered, continuous, comprehensive, coordinated, compassionate and culturally effective. Care at the FMC is provided by a multidisciplinary team including physicians, NPs, PAs, nurses, medical assistants, behavioral health consultants, pharmacists and social workers.

Individuals needing to transition care are generally referred to the FMC by providers at Akron Children's Hospital Neuromuscular Care clinic. Patients and caregivers are invited for a meet and greet appointment to learn about the FMC and services available.

The FMC uniquely provides the advantage of being able to provide care to patients with complex needs across the healthcare continuum of hospital, office and home. The opportunity for patients to see FMC providers in each of these settings allows for close monitoring and coordination of healthcare measures. The ability to recognize subtle changes in status allows for quick interventions for those with a fragile health status.

Young adults with chronic childhood-onset conditions encounter unique challenges when entering the acute care setting through the ER and when admitted to the hospital. For this reason the FMC developed an Orange Team card identification system. This designation identifies the patient and caregivers as having unique needs that may require individual accommodations in the provision of care. Upon presentation to the hospital the Orange team card allows for rapid activation of the FMC complex care team.

To promote high level comprehensive care, the FMC offers young adults with chronic childhood-onset conditions the opportunity to participate in a Multidisciplinary Clinic. This clinic, offered monthly, brings hospital specialists from pulmonology, cardiology, palliative care and pastoral care to the FMC. Patients and caregivers are seen by each specialist in addition to the FMC care team. The team then meets to collaborate on the patient's plan of care.

When needed, the FMC will provide care at the patient's home. For individuals who are ventilator-dependent without available transportation this may be their only access to a primary care provider.

The FMC Complex Care team currently provides care to 30 patients who have successfully transitioned care to Summa Health. Ninety-four visits were completed in 2019.





Red Heart Project - Barberton Family Practice

Barberton Family Medicine Center embarked on a Hypertension Quality Improvement project in 2019.

Our multi-pronged goal was to:

1. Improve hypertension control in our patient base.
2. Ensure each staff member took the blood pressures properly and that we followed the same procedure each and every time we took a blood pressure.
3. Educate the patient on the proper way to take a blood pressure at home, following a DASH diet, and being physically active to lower blood pressures.
4. Ensure follow-up of patients with blood pressures of 140/90 or greater within 30 days from office visit.
5. Collaborate with Durable Medical Equipment to be able to give a patient a blood pressure cuff prior to the patient leaving the office.

A lot of education took place in order to reach our goals. First, we had to educate our staff on proper blood pressure taking. Our residents recorded a video demonstrating proper blood pressure reading as part of the QI project. This video is now used to educate staff and new residents on proper blood pressure reading. Also, staff were observed in real-time (using our exam room recording technology) and given immediate feedback as to areas of improvement for checking blood pressure correctly.

Our work flow for in office blood pressures is as follows:

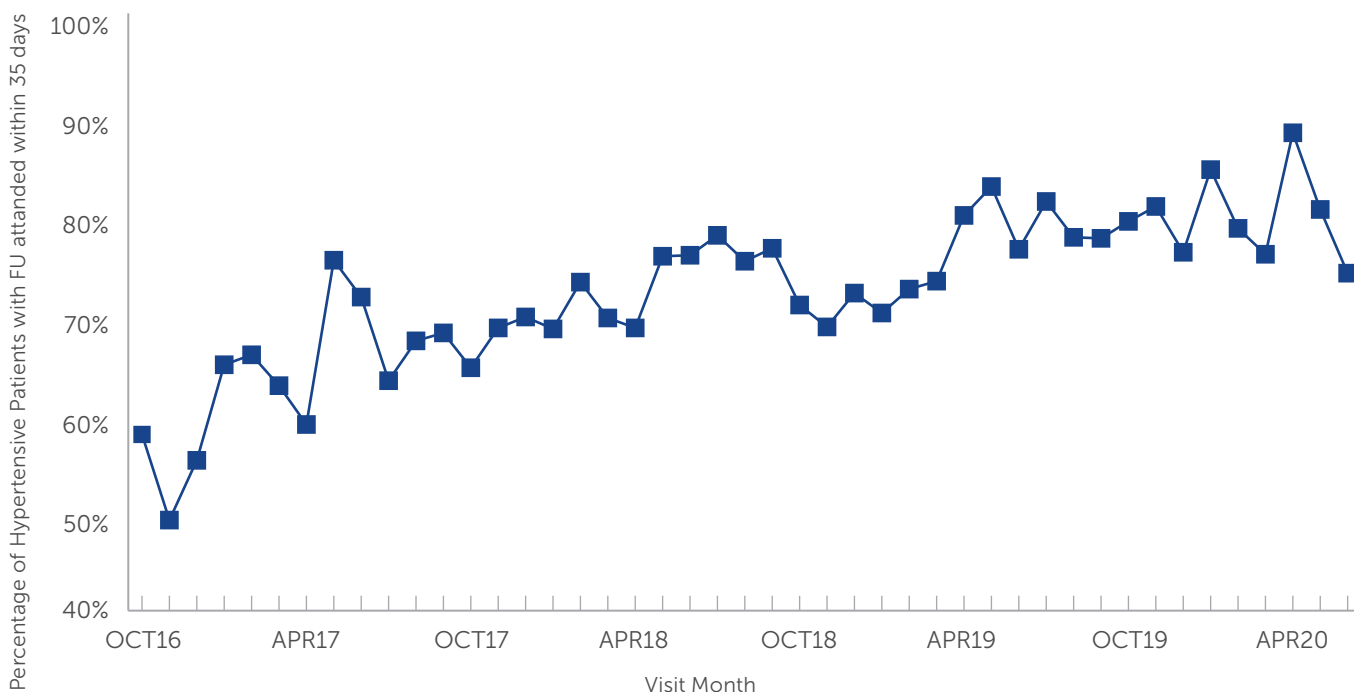
1. Wait five minutes before the first blood pressure is taken. Make sure patient is not talking, feet are flat on the floor, appropriate cuff size is on bare arm, back is resting on the back of the chair, arm is supported at heart level and bladder is empty.
2. If the initial BP is 140/90 or greater we wait an additional three minutes and repeat the blood pressure. If the BP remains elevated we hand the patient a RED HEART cut out. We then explain to the patient that as soon as the doctor enters the room please discuss your elevated blood pressure with him/her. We also leave a pink laminated sheet with the words "repeat blood pressure was high, please address" that acts as a visual cue to the physician.
3. We instruct the patient to hand the RED HEART to the checkout personnel upon exiting. The RED HEART triggers the checkout personnel to insure the patient is scheduled for follow-up on their high blood pressure within 30 days from office visit.

Many of our patients voiced difficulty receiving their home blood pressure cuffs from the outpatient pharmacies. We then teamed up with Cornerstone Medical Equipment, located within our Barberton Campus, to assist us in getting our patients' blood pressure machines delivered to our office. If a patient is noted to have hypertension, we are now able to give them a blood pressure cuff before they leave the office. When a patient receives a blood pressure cuff they are educated on the correct way to take their blood pressure at home. We also hand out education and discuss the DASH diet (low sodium) as well as the

importance of physical exercise to lower blood pressure.

Since implementation of the RED HEART project, our blood pressure control is markedly improved. In 2019, Barberton Family Medicine Center was awarded for exceptional clinical care demonstrating the TOP IMPROVEMENT in Blood Pressure Control overall and for African-American patients who were a focus of this study due to this population having a higher risk of health disparities. The award was sponsored by Dr. Donald Wharton of the Ohio Department of Medicaid.

Percentage of Hypertensive Patient Visits with Controlled Blood Pressure (<140/90)



Polypharmacy Management



Michelle Cudnik, Pharmacist

The Internal Medicine Center (IMC) is the outpatient clinic associated with Summa Health's internal medicine residency program. This clinic provides a broad spectrum of care and services to the Akron adult community through medical doctor faculty and residents, nurse practitioners, a social worker, behavioral health consultant, and onsite pharmacist. The IMC serves as a critical resource for the community by providing patients of all backgrounds and needs the primary care they need to pursue their own best health.

In an effort to improve the health of our patients in 2019, the IMC began a polypharmacy initiative. Polypharmacy is generally defined as the concurrent use of five or more

medications. Polypharmacy is a public health problem associated with adverse health events, negative health outcomes, and expenditure on healthcare resources. Patients with multiple chronic illnesses such as diabetes, hypertension, arthritis and heart disease, along with the elderly population are among those at risk for polypharmacy and its associated effects such as adverse drug reactions, drug interactions, and medication non-adherence. The multitude of resources available within the IMC posed the clinic for success in overcoming this health problem.

A review of clinic patients identified nearly 200 patients who were each taking over 15 medications as the initial pilot for this program. These patients received an outreach letter requesting that they make an appointment with the office for a polypharmacy visit. Polypharmacy visits at the IMC are staffed by the pharmacist and include elements of medication evaluation and de-prescribing as appropriate, evaluation of patient health literacy as it pertains to numeracy and drug use, communication with specialists and primary care providers, and patient education. These visits highlight the benefits of reducing polypharmacy for IMC patients. **Patients seen in the clinic for polypharmacy visits successfully reduced their prescribed number of medications.** This initiative is continuing into 2020 as patients who will benefit from this outreach continue to be identified and scheduled for polypharmacy visits.

Summa Health Neuroscience Institute

Award-winning Stroke Care

In July 2019, Summa Health System— Akron Campus became the first Ohio hospital to achieve The Joint Commission Advanced Thrombectomy Capable Certification. Summa was also awarded as one of America's 100 Best Hospitals for Stroke Care by HealthGrades, recognizing us in the top 2% of hospitals across the nation for our stroke care.

With expansion of our internal stroke care team, as well as an increase in transferred patients for advanced stroke care, Akron Campus treated 118 patients with clot busting drug treatment (alteplase) and 46 patients with endovascular thrombectomy (clot retrieval). Not only did we increase the number of patients treated, we improved the timeliness of both treatments. Our hospital arrival to treatment time for the clot busting drug, which was already well below the national benchmark of 60 minutes, was further decreased in 2019 by an additional 9 minutes, to an average of 38 minutes.

Stroke and Neuro Critical Care/Inpatient



Susana M. Bowling,
M.D., FAHA, FNCS



Rebecca Gezzar,
APRN-CNP

Interventional Neurology



Aashish Anand, M.D.



Alexander P. Venizelos,
M.D.



Valerie Bosz, AGACNP-
BS, SCRNP

Neurosurgery



Samuel Borsellino, M.D.



Dane Donich, M.D.



Iris Javersak, PA-C



Mason Hartzler, PA-C

General Neurology/ Inpatient



Mita Deoras, M.D.

Stroke Coordinator



Kim Szymczak, MSN,
APRN, GCNS, SCRNP, ENLS

Stroke Navigator



Monica Dever, BSN, RN,
SCRNP, ENLS

Two million neurons die every minute during a stroke. Akron Campus has earned the American Heart Association/American Stroke Association Gold Plus award for timely clot buster drug treatment for the 10th year in a row. In 2019, the AHA/ASA raised the bar even further including an aggressive target of 50% of clot buster drug treatments administered in less than 30 minutes. Akron Campus not only accepted, but was able to meet this vigorous challenge.

After hiring our second Neurointerventional Surgeon in 2019, Summa offers 24/7 specialists to perform thrombectomy intervention for acute stroke patients. Hospital arrival to thrombectomy procedure start times decreased on average by 41 minutes in 2019, with 36% more cases meeting the national goal of procedure start time less than 90 minutes after hospital arrival.

Offering extensive endovascular care, the program nearly doubled the number of aneurysm patients treated as well as additional, minimally invasive procedures for treatment of specific types of bleeding in the brain. Summa completed three times the diagnostic cerebral angiograms in 2019, resulting in nearly double the number of patients receiving minimally invasive aneurysm coiling treatment.

Additionally, Summa Health System – Barberton Campus ran a total of 73 stroke teams in 2019, double the number of stroke teams two years prior. Time is brain in the matter of stroke. Rapid identification and transfer of intervention candidates to a certified stroke center is key. In addition to administering clot busting drug treatment, Barberton ER was able to decrease the median transfer time by 29 minutes in 2019, and below national goal of 90 minutes.

Summa hired a Stroke Navigator at the end of 2018, making PCP follow-up appointments prior to patient discharge as one focus of the role. In 2019, to enhance transitions of care, Summa discharged 77% of stroke patients with a PCP follow up appointment already scheduled, significantly outperforming other Ohio hospitals at only 29%.

Summa Neuroscience Institute continued to grow in 2019 to meet the needs of our community and that growth continues in 2020. We will be adding outpatient neurology follow up as well for 2020. With 24/7 coverage by Summa Health Medical Group neuro interventional surgeons and the hiring of two Summa Health Medical Group neurosurgeons, Summa provides quality, comprehensive neuroscience care.

Door-to-Drug (D2D)

Summa Health System – Akron Campus time:



minutes

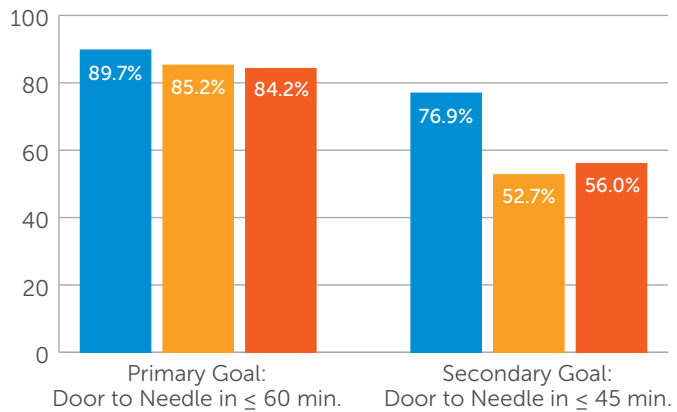
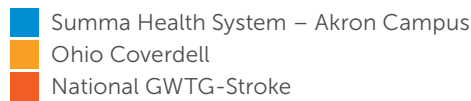
Savings of 44 million neurons!

22 minutes faster!
National Benchmark time:



minutes

Door to Needle Time



Door to Needle < 60 min.

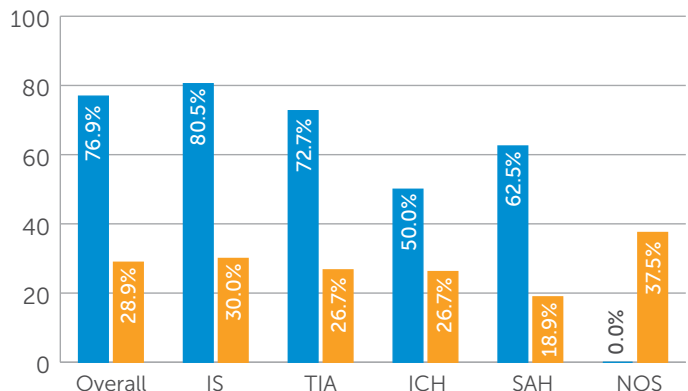
Summa 90% (5.2% increase from 2018), Other Ohio hospitals 85%

Door to Needle < 45 min.

Summa 77% (7.9% increase from 2018), other Ohio hospitals 53%

Summa treats 24% more patients < 45 minutes than other Ohio hospitals

Primary Care Provider (Discharge to Home) Appointment Scheduling by Stroke Type



Summa Health Orthopedic Institute

The Summa Health Orthopedic Institute's volume and market share has grown yearly indicating its focus on efficient quality care and outcomes. Office patient satisfaction is currently above 95%.

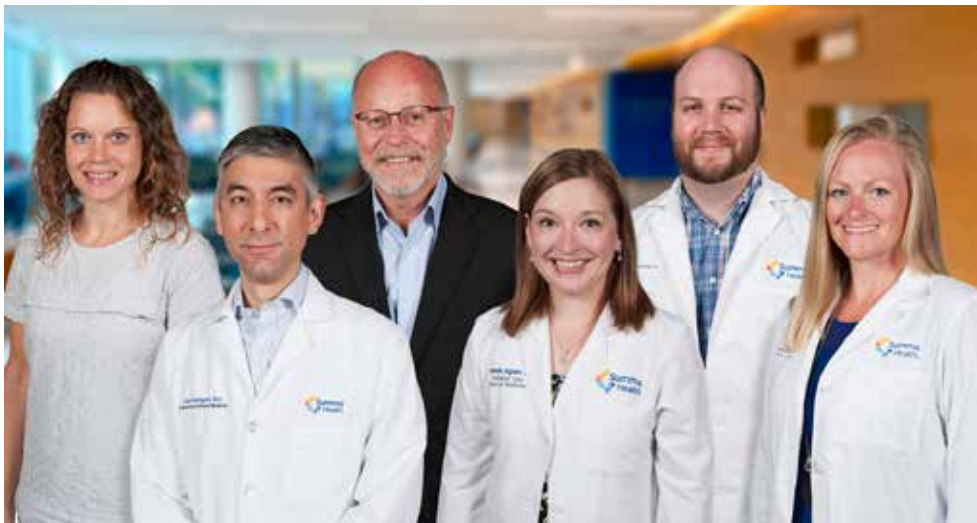
We've worked with anesthesia on in-patient pain management. We have successfully implemented decreased opioid usage and use of other medications for pain. Many of our elderly hip fractures are getting pain nerve blocks in the emergency room which has decreased delirium and narcotic related issues.

Summa Health Medical Group ortho/sports medicine has grown rapidly to meet the needs of the community. Currently, 12 surgeons, five primary care sports medicine physicians and eight advanced practice providers provide same day/next day appointments at one of our eight regional office sites.

Outpatient surgery has become a focus at our Wadsworth location. This site provides easy access, efficient and high value care.

Finally, our residency program has 20 orthopedic residents and two sports medicine fellows. They are involved in quality committees for areas of the hospital providing input and quality improvement initiatives.

Summa Health Palliative Care Services



Ellen Irwin Saal-Patterson, LISW-S; Luke Hashiguchi, M.D.; Shannon Blower, MA, MAR; Danielle Ingram, M.D.; Chris Kingsland, PharmD, BCGP; Melissa Soltis, M.D.



Caring for the Caregiver

A division of Summa's Palliative Care Services, Pastoral Care launched a quality improvement initiative that addresses Secondary Traumatic Stress (STS) in critical care nursing. While often identified as Compassion Fatigue, STS is the emotional/spiritual distress caused by caring for or witnessing the intense suffering of others. Manifestations of STS include job dissatisfaction, hiddenness, detachment, moral injury and hopelessness. A novel compassionate self-care approach was developed to offset the debilitating exposure to STS and the chronic stressors present in healthcare.

The program, Caring for the Caregiver, pays attention to the person as a whole. Recognizing factors outside of the healthcare context is key to assessing those at risk for STS. Often, past and current stressful experiences create a metric by which caregivers evaluate themselves, coworkers, administration and the patients they serve. All of these factors are known to significantly contribute to the way nurses are able to directly impact the patient experience.

The pilot program is organized around three central principles self-compassion:

1. Self-Awareness
2. Listening to Inner Dialogue
3. Challenging Limiting Beliefs

In October 2019, Summa's Palliative Care Department received a grant from Summa's Womens Philanthropic Circle which insured the implementation of Caring for the Caregiver. Nearly a dozen nurses are actively involved in the Caring for the Caregiver program presently.

Summa Health's Palliative Care Program Receives National Accreditation

Summa Health's Akron Campus Palliative Care Services earned The Joint Commission's Gold Seal of Approval for Palliative Care Certification by demonstrating continuous compliance with its performance standards in 2019. The Gold Seal is a symbol of quality that reflects a healthcare organization's commitment to providing safe and quality patient care. This certification recognizes Summa Health's Palliative Program's efforts to provide patient- and family-centered care and to optimize the quality of life for adult patients with serious illnesses. It focuses on addressing patient's physical, emotional, social and spiritual needs while allowing patient autonomy and helping them to make informed choices about their care.

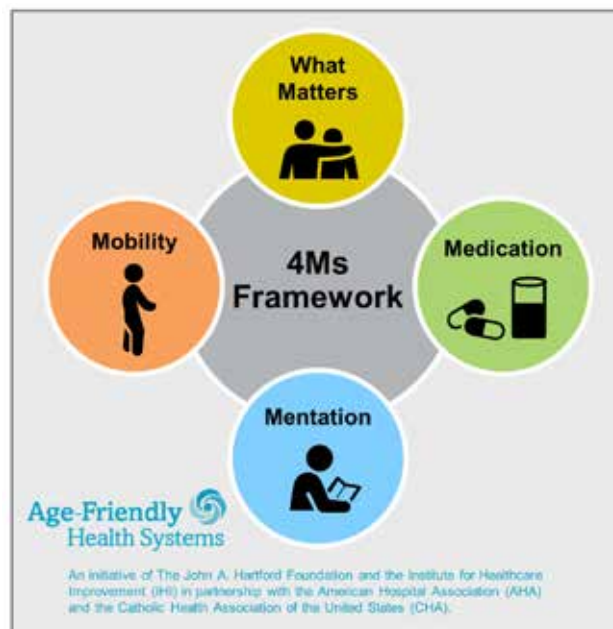
Summa Health's Akron Campus Palliative Services underwent a rigorous onsite review in October 2019. During the visit, a team of Joint Commission reviewers evaluated compliance with related standards including transitions of care, coordination and communication among team members, symptom management, addressing goals of care with patients and families, and many other key components. The reviewers conducted onsite observations, patient interviews, staff interviews, and chart audits. The evaluation ensured that sound clinical care and pathways are consistently followed to guide patients within our health system to palliative care services when appropriate. The review also evaluated compliance that all Palliative Care patients are assessed and treated for all components of suffering during their illness. This specifically includes assessments for spiritual care needs, social needs, and grief risk screening.

This certification celebrates Summa Health's commitment to continuous quality improvement in clinical processes and strengthening the framework for management for palliative care patients that we serve.

Summa Health Seniors Institute

Age Friendly Designation

The Summa Senior Health Center, along with two inpatient units - the ACE Unit on 5 North at Akron Campus and 4 South at Barberton Campus - have achieved the Institute for Healthcare Improvement (IHI) designation for Age-Friendly. This designation is part of a national effort to improve care for older adults. The designation of Age Friendly reflects a commitment to addressing the "4Ms" which ensure that mentation, medications, mobility and what matters most to patients are addressed at all patient encounters. Achieving this designation supports Summa's commitment to optimize outcomes for older adults and population health.



Geriatric Workforce Enhancement Program

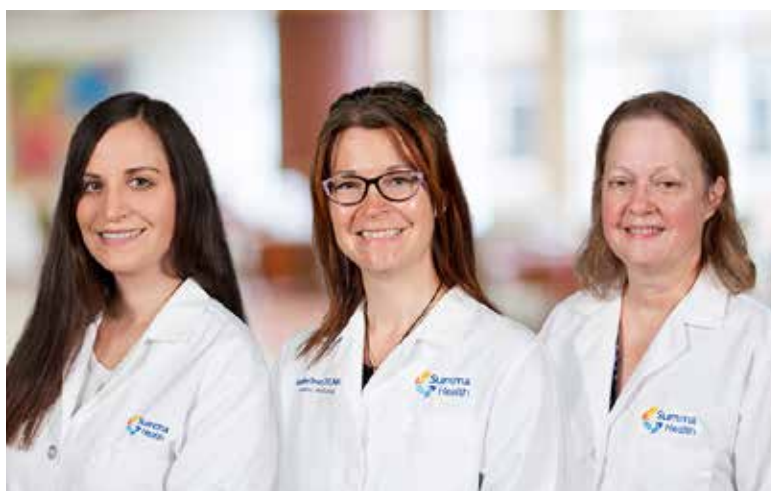
The Department of Geriatrics, partnering with Northeast Ohio Medical University, completed the first year of a new grant from Health Resources and Services Administration (HRSA). This \$3.7 million, five-year grant, the Geriatric Workforce Enhancement Program (GWEP), was the only such grant issued in the state of Ohio. In partnership with Direction Home Akron Canton Area Agency on Aging, The University of Akron, Cleveland State University, Saber Healthcare Group, and others builds on previous successes to provide education to primary care providers and offices, professionals and direct care workers inter-professional students, and community members. The collaborative has also partnered with the Middlebury Neighborhood and the Ohio Council for Cognitive Health to provide dementia care training to community members.

More than 800 people, representing 20 sectors of healthcare and the community, have been trained under this new grant. The team had several peer-reviewed publications and was set to present six different presentations and posters at the American Geriatrics Society Annual Meeting in Long Beach California this spring.

Summa House Calls

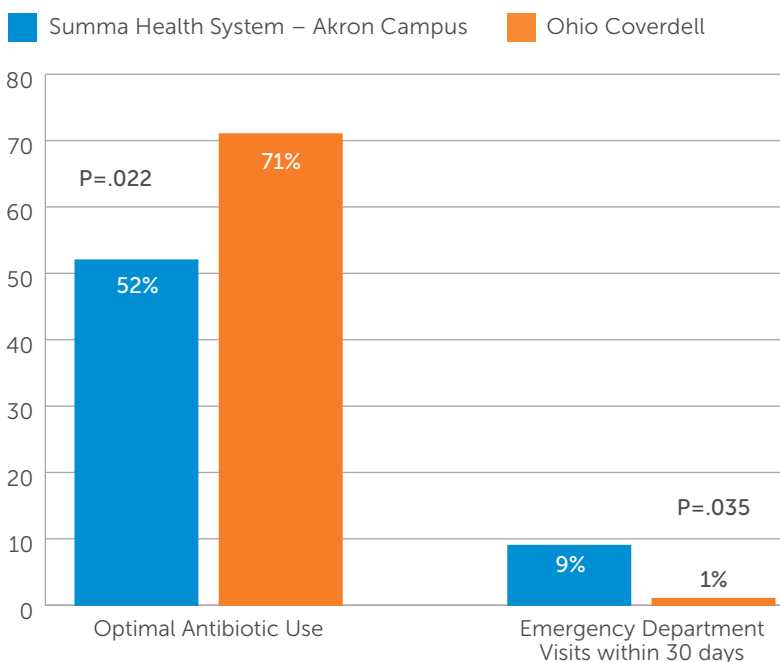
Summa House Calls provides primary care to homebound older adults living in the community. These individuals face complex medical conditions, cognitive and functional decline, and depend on caregivers in the home. It provides an inter-professional team approach to meet the healthcare needs of the patient. The core team consists of Geriatric Nurse Practitioners, fellowship trained geriatricians, a social worker, a nurse care manager and a pharmacist. In 2019, the team made over 2,500 home visits.

Partnering with antibiotic stewardship, under the leadership of Paula Politis, PharmD, Summa House Calls participated in a study supported by MAD-ID to evaluate the effects of antibiotic stewardship and provider education on antibiotic use in urinary tracts infections (UTIs) in this frail population. Results demonstrated an increase in appropriate antibiotic use in UTI complaints and a reduction in ED visits.



Paula Politis, PharmD; Jennifer Drost, D.O., MPH; Sue Fosnight, RPh, BCGP, BCPS

Antimicrobial Stewardship for UTIs in House Calls Patients: Results



Summa Health Weight Management Institute



Reaccreditation

In 2019, we were reaccredited as Comprehensive Metabolic Bariatric Surgery Center by the American College of Surgeons. Criteria verifies program administration and clinical outcomes focused on best practices and a commitment to quality and process improvement.

Metabolic Weight Loss Surgery Comorbidity Resolution

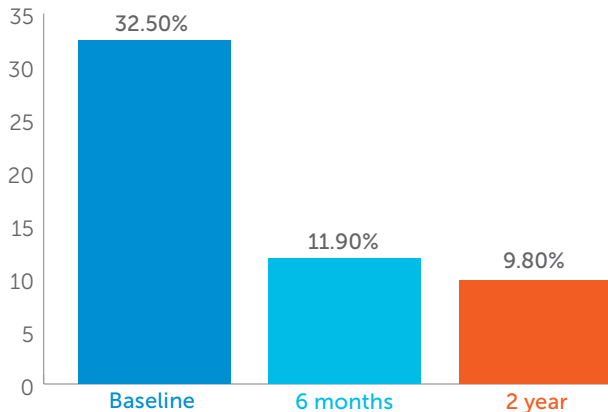
Laparoscopic Roux-en-Y Gastric Bypass surgery addresses a patient's diabetes and decreases or eliminates a patient's need for insulin.

Two-year follow graphs below show the decrease in percentage of patients who have Type 2 Diabetes from baseline before surgery to two years later.

The reduction in diabetes is a long-term health benefit of metabolic bariatric weight loss surgery.

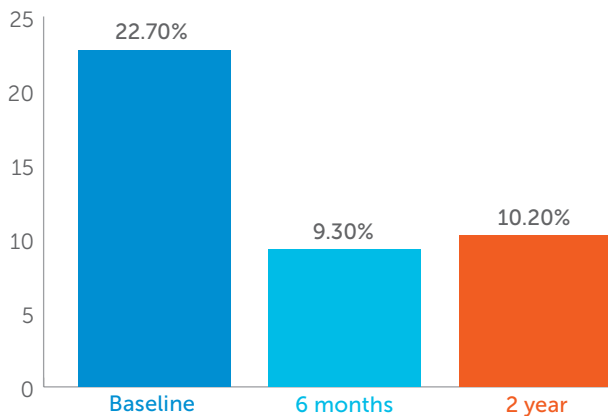
Laparoscopic Roux-en-Y

73% reduction of Type 2 Diabetes from baseline at 2 year follow-up.



Sleeve Gastrectomy

62% reduction of Type 2 Diabetes from baseline at 2 year follow-up.



2019 Clinical Outcomes. SARL Semi-annual Risk Adjustment Report

Average Length of Stay

Procedure	Summa Health's Bariatric Care Center Rate	National Rate
Roux-en-Y Gastric Bypass	2.22%	2.40%
Sleeve Gastrectomy	1.33%	2.00%

30-Day Mortality

Procedure	Summa Health's Bariatric Care Center Rate	National Rate
Roux-en-Y Gastric Bypass	0.00%	0.20%
Sleeve Gastrectomy	0.10%	0.10%

2nd Annual Akron Obesity Awareness Forum

On September 13, 2019, the Summa Health Weight Management Institute held its second annual Obesity Awareness Forum in Akron. This forum is an opportunity for medical providers to come together and collaborate, hear from experts in the field of obesity, and arm themselves with the most recent knowledge available.

Due to the strength of the Summa Health Weight Management Institute's program and reputation in the industry, we were able to secure world-renowned surgeon Walter J. Pories, M.D., FACS as the keynote speaker. A pioneer in obesity medicine, Dr. Pories is a shining example of the professional excellence in medicine the Summa Health program strives to emulate.

At the forum, Dr. Pories discussed, "The Metabolic Mechanisms of Type 2 Diabetes" and shared powerful new evidence of the link between obesity, type 2 diabetes and metabolic disease. A question and answer session with the expert followed. In addition, Christina Rowan, Ph.D., also discussed the social stigma, prejudice and bias of obesity.

Led by Dr. Adrian Dan, the forum offered to all Akron area providers is now in its third year and each year an internationally recognized expert and Summa Health providers specializing in the field of obesity present on the topic of obesity and its treatment.

Summa Health Women's Health Institute

Women's Health Center- Mommy & Me

Abuse of opiate drugs has been called a national public health crisis. The number of pregnant women addicted to opiates served by our healthcare system has increased 492% since 2011, compounding the already-urgent problem of high infant mortality and preterm labor rate in Ohio.

Pregnancy complicated by addiction is a treatable condition. To help with this, Summa Health developed the Maternal-fetal Opiate Medical Home (MOMH), a specialized, innovative and highly coordinated care pathway for opiated addicted mothers. The MOMH program, implemented in 2014, identified the benefits of CenteringPregnancy® which are group prenatal visits instead of traditional prenatal visits. Group prenatal care brings women together into a comfortable group setting. By learning from each other along with receiving the care of their provider, the mothers are better prepared for labor, delivery, and to care for their infant. After completing the Women's Health Center's prenatal centering program, our mothers requested to continue their group visits after their pregnancy.

In March 2019, the Women's Health Center started a new program titled "Mommy Care - Your 4th Trimester."

The fourth trimester is the idea of a transitional period between birth and 12 weeks postpartum during which the baby is adjusting to the world, and the mothers are adjusting to their new baby. Located on the Akron Campus, as Summa Health's Ob/Gyn outpatient residency clinic, the Women's Health Center provides an ideal location for centering programs with ease of access for many members of the community.

This new program's goals are to provide services and resources for good health and successful parenting in a safe and welcoming group setting. Topics for discussion include breastfeeding, healthy relationships, well baby care, immunizations, child safety, wellness and nutrition, and community resources. This program meets every other week for one to two hours depending on the needs of the mothers and babies. This group includes women of different ages, races and socio-economic backgrounds. Mothers actively participate and are involved in discussion with their peers who have a greater understanding of what they are also experiencing. In 2019, 73 mothers attended these group sessions with their babies. Our mothers feel they have formed lasting friendships from these programs and gained important information for themselves and their babies.



New Tower Move

The Obstetrics Department moved from Summa Health Akron's 2W L&D into the H tower on Memorial Day weekend, 2019. Moving into an unfamiliar and much larger new space can be intimidating and fraught with anxiety for caregivers. In-situ simulation was one of many preparedness training methods employed to create comfort and confidence for staff and providers in fulfilling their roles in the new space. Fortunately, our OB department started a simulation program in the 1990s and an award-winning simulation program has evolved over the years.

Planning for the tower move simulations began in 2018 with a multidisciplinary group. The group was led by Jennifer Doyle, APN as well as Dr. Derek Ballas and Alma Benner of Summa's Simulation Center, and also included Department of OB/GYN Administration, five staff nurses, a resident physician, Dr. Thomas Mendise, the Residency Director and representation from Anesthesia. Simulations were planned to maximize staff and provider familiarity and comfort with the flow of care as well as the logistics of the physical layout of the unit. Opportunities were afforded for all Women's Health Institute care providers (nurses, resident physicians and providers), Anesthesia Department members, and Family Practice Department providers to attend at different days or times over a four-week period, from April 29 to May 23, 2019. The simulations ended just a week before the actual move into the new space so the learning would be fresh in everyone's mind.



Dr. James Graham, Attending Physician, Women's Health Group, participates in an emergent cesarean delivery simulation scenario with members of the OB and Anesthesia Team in preparation for the new H Tower opening in May 2019.



L&D RNs Theresa Strecker and Debra Horning pause for a picture during the transition of Obstetric Services from 2 West, Akron Campus to the H Tower in May 2019.

Intrapartum nursing staff were required to attend two simulation sessions: one for vaginal delivery scenarios, and one for cesarean delivery scenarios. Each session lasted four hours. All simulation sessions started with a 30-minute tour of the unit to familiarize important workflow points and critical equipment locations. Clinical scenarios followed which covered everyday standard processes, then increased in complexity and challenge. The vaginal delivery sessions started with a normal vaginal delivery and quantification of blood loss. The vaginal delivery simulation scenarios then graduated to a hydrotherapy/labor tub evacuation, to an emergency umbilical cord prolapse in the antenatal unit with a move to the OB OR and emergency cesarean. Additionally, the final scenario entailed an operative vaginal delivery followed by a massive maternal hemorrhage, and maternal code.

The cesarean delivery simulation session mirrored this approach; starting with a tour, then a normal scheduled cesarean section: welcoming the woman and support person(s) in the waiting room, then caring for them through the surgery and all the steps therein, including baby care and quantification of blood loss in the OR. The cesarean scenarios then graduated into an emergency cesarean from a labor suite, and ended with a fire in the OR.

Many lessons were learned via in situ simulation. The simulation team logged questions that arose during the simulations, kept a tally, and provided follow-up once definitive answers were reached.

Examples of lessons learned and gaps filled include:

- Ways to efficiently transfer a mom to the O.R., given the existing doors and alarms
- Adding hemorrhage supplies to every labor room, or to key locations, for quicker access

The physical size of the unit was a challenge and the importance of proactive actions became glaringly apparent, as well details that can impact crew resource management, such as being cognizant of the four-digit room numbers and utilizing standardized terminology related to locations during every day care, not just during stressful situations.

The tower move simulations were a success and highly valued by the participants. Natalie Brzozka M.D., Alexandra Schueler, M.D., Derek Ballas, D.O. and M. David Gothard studied confidence levels of nurses, midwives, residents and attending physicians after the move in a resident research study titled, "Assessing Preparedness of Labor & Delivery Personnel in Transitioning to a New Facility." This study found that simulations were the highest rated preparedness training modality provided. Anecdotally, a number of our nurses had experience moving to a new space in previous employment. They all expressed appreciation for the preparation, attributing the success to Summa Health's willingness to dedicate time and resources for the simulations. The team preparedness for the H Tower transition in situ simulation program stands as an example of Summa Health's ongoing commitment to quality and safety.

Past Accolades: 2011 Ohio Patient Safety Institute Best Practice Award, an In-situ Simulation Program for Obstetric Emergencies, **2009 Risk Management Award from the American Excess Insurance Exchange (AEIX)**, an In-situ Simulation Program for Obstetric Emergencies.

Summa Health

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