An Epic Journey
A sea of poppies, captured by an Enloe caregiver, is among the local landscape photographs on display at Enloe Behavioral Health, helping create a peaceful ambiance.
The year leading up to the 2017 Quality Summit was extraordinary. Continuing a trend established with the 2012 opening of the Magnolia Tower, ever-increasing numbers of medical, surgical and emergency patients chose Enloe Medical Center for their health care.

Enloe welcomed three Joint Commission survey teams whose role is to periodically review care at accredited hospitals. The successful hospital, laboratory services and stroke program surveys demonstrated the high level of care provided every day.

Once again, an Enloe program received the International Spirit of Planetree Award for Patient-Centered Excellence and Innovation. In 2016, the Bariatric Program was honored with this award for its comprehensive, patient-centered approach to weight-loss surgery, following the Total Joint Replacement Program’s recognition in 2014.

And then came the Oroville Dam emergency. On Feb. 12, 2017, Enloe responded immediately when it appeared the dam’s emergency spillway may breach. Enloe caregivers joined county, state and federal resources to care for the region’s residents, including 29 patients evacuated from a hospital at risk for flooding.

In the midst of all this activity, Enloe also embarked on a much-anticipated transition to the Epic electronic health record. Far from being just an information technology project, this new, integrated platform promises to improve care processes, caregiver communication and patients’ access to information.
Patient Satisfaction

The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey was launched in 2006 as a way to measure an important aspect of medical care: the patient experience. At that time, patients rated their care at Enloe in the lowest 2nd percentile. With an organizational focus on patient-centered care, Enloe patients now consistently rate their experience well above the national average. These results reflect caregivers’ focus on the hospital’s mission: To improve the quality of your life through patient-centered care.

Potentially Avoidable Infections

Certain types of intravenous catheters, called central lines, are linked to a higher risk of infection. These central line-associated bloodstream infections (CLABSI) carry significant risk to patients, including a longer length of stay in the hospital and higher risk of mortality. Enloe monitors this metric, and when an upward trend was noticed in 2015, teams created new processes to reduce the incidence of these infections. The result is a steady reduction in CLABSI, with the ultimate goal to have zero CLABSI at Enloe.

Lasting quality is achieved when improvements are hardwired into daily processes. Each Quality Summit, Enloe looks back on prior years’ projects to see how well we maintain the gain.

Antibiotic Stewardship

Antibiotic resistance is an important health care concern. To address this problem, broad-spectrum antibiotics must not be over-used. Enloe pharmacists, physicians and laboratory scientists collaborate on treatment guidelines that help prescribers select appropriate, more specific medication choices. Since 2013, the use of certain broad-spectrum antibiotics (meropenem and piperacillin-tazobactam) and the occasionally used non-formulary agents imipenem, doripenem and ertapenem per adjusted patient day has decreased. This work increases the likelihood that these powerful antibiotics will remain effective to treat severe infections.

Broad-Spectrum Antibiotic Days of Therapy

2013 – 2017 Trend
Four quality initiatives were selected as priorities for 2016-2017. These projects involve creating a new patient service, promoting timely and efficient diagnosis, and fine-tuning communication between members of the care team.

Efficient Diagnosis: Diagnosing Meningitis and Encephalitis
When infection of the tissue covering the brain (meningitis) or the brain itself (encephalitis) is suspected, making a timely and specific diagnosis is critical. In early 2017, a new test was introduced that enables early identification of some of the most common bacteria, virus and fungi that cause these infections. Rapid diagnosis allows patients to start targeted therapy for these serious conditions.

Care Team Communication: Accurate Documentation of Input and Output
Accurate communication of a patient’s fluid balance is central to safe patient care. Knowing how much fluid goes in and how much comes out impacts daily clinical decision making. Through education and redesign of existing processes, reporting input and output data aligns with the staff’s change of shift, which improves the accuracy of documenting this important metric.

Enloe Bone Health Program
Osteoporosis-related fractures impact many in the north state. In development now, the Enloe Bone Health Program will offer osteoporosis evaluation and treatment to Orthopedic & Trauma Clinic patients who have had a fragility fracture, such as a wrist fracture after falling in a parking lot. The multidisciplinary program’s goal is to improve patients’ quality of life by reducing the risk for future osteoporosis-related fractures.
Each year, departments throughout Enloe share their quality improvement journeys with colleagues and the community. Among the 77 poster presentations was an innovation that allows the FlightCare emergency transport team to better transport blood products. Another was a written translation board used by Guest Services to improve communication with Spanish-speaking visitors. The quality improvement posters are on view throughout the year in the hospital, allowing visitors to share in the many success stories.

**Endoscope Cleaning**
Attention to detail ensures that the cleaning and disinfection of scopes used to examine the intestinal tract meets the highest performance standards.

**Disposable Bronchoscopes**
The use of a disposable bronchoscope to examine the airway of certain critical care patients has improved the procedure's efficiency and safety.

**Oncology Nursing**
Oncology nursing focuses on education, best practice and teamwork to improve the care of cancer patients.

**Transport of Critically Ill Patients**
A multidisciplinary team of heart perfusionists, critical care nurses and therapists, and FlightCare crew members created processes to safely transport patients requiring Extracorporeal Membrane Oxygenation (ECMO) to tertiary care centers.

**VIVA! Supports Families**
The redesigned VIVA! Support Program provides information and support to kids impacted by cancer in their families.

**Reducing Central Line Infections**
Through data analysis, education and daily monitoring of all central lines, infections of these intravenous lines have significantly decreased since 2016.

**Crash Carts Always Ready**
Central Supply ensures that the adult and pediatric emergency response carts (“crash carts”) have all the items required to safely respond to life-threatening situations.

**Respiratory Care Practitioners**
Since April 2016, each critical care unit has dedicated Respiratory Care Practitioners who are integrated into the care teams, improving patient care and safety.

**Commercial Driver Certification**
Client Services uses consistent processes to help drivers obtain and maintain Department of Transportation medical certification.

**Outpatient Deep Vein Clot Treatment**
Consultation with a clinical pharmacist in the Emergency Department enhances safe treatment of patients able to go home after a diagnosis of lower extremity deep vein blood clot.
Community Paramedicine
Enloe’s participation in a statewide Community Paramedicine program demonstrated a 15% reduction in readmissions for enrolled heart failure patients and a 14% reduction in readmissions for enrolled acute myocardial infarction patients.

Preparing for Disaster
Emergency Department staff lead multidisciplinary drills to ensure that when a disaster strikes, the hospital is ready to receive and care for up to “50 patients in 15 minutes.”

Students at Enloe
Enloe hosts 14 programs annually that provide clinical and non-clinical educational experiences to nearly 1,000 students.

Caregiver Generosity
In 2016, nearly 1,500 families, businesses and individuals, including 744 Enloe caregivers, contributed to the Enloe Foundation, making programs like the Healthy Steps cancer support class possible.

Healing Artwork at Behavioral Health
Enloe Behavioral Health staff and their families provided photographs of favorite north state landscapes to enhance the healing environment in their area.

Non-surgical Hemorrhoid Treatment
Hemorrhoid banding is an office procedure that is 99% effective in treating internal hemorrhoids in an office setting.

Enloe Ear, Nose and Throat Clinic
The ENT Clinic is committed making continual improvements in patient safety and patient-centered care provided by engaged, dedicated staff.

Gurney Van Implementation
Enloe’s two new gurney vans provide efficient, more affordable patient transport for non-emergent transfers.

Improving Bariatric Surgery Experience
The Bariatric Surgery Program did a study comparing the use of four post-operative anti-nausea regimens: ginger plus standard therapy, standard therapy, Emend (a new anti-nausea medication) plus standard therapy and Emend plus ginger with standard therapy. The study indicated that the hospital stay was much shorter for patients receiving Emend plus standard therapy, with or without ginger.
Medical Neurological Unit: A World of Quality

5th Floor Medical Neurological has achieved the American Heart Association/American Stroke Association’s Get with the Guidelines-Stroke-Gold Plus Achievement Award for the past eight years, demonstrating consistent dedication to high-quality, multidisciplinary stroke care.

Timely Stroke Care

The Stroke Program achieved its goal of providing timely intravenous therapy to appropriate brain attack patients.

Neurosurgery and Spine Program

This program maintained its Blue Distinction Center+ in Spine Surgery in recognition of the quality processes and outcomes it provides.

Security Services

Enloe’s Security Services is in the process of transitioning to Private Patrol Operator licensing to help ensure a safe environment throughout the Enloe properties.

Rehabilitation Center Team Huddles

Nurses, therapy team members and case managers huddle each weekday to ensure optimal communication and coordination of care, reducing “last minute” discharge issues by 60%.

Surgery Scheduling Department

With attention to detail, Enloe surgery schedulers have scheduled 25% more elective surgeries in the first quarter of 2017 than in the first quarter of 2015.

Employees, physicians and volunteers work together to provide quality, personalized care, from all angles, in a healing environment.
STOP-Bang Questionnaire
At Enloe Same-Day Surgery, a seven-question survey identifies patients with possible obstructive sleep apnea so this can be considered in their total care plan.

Preparing for Surgical Experience
Increased referrals to the Enloe Surgical and Procedural Assessment Area (ESPAA) allow staff to better anticipate patient needs and improve surgical efficiency.

Fecal Microbiota Transplantation
Since 2015, Enloe gastroenterologists have performed FMT to introduce beneficial bacteria into the intestine to treat serious infection from overgrowth of the C. difficile bacteria.

Volunteer Services Skills Fair
In 2016, the inaugural Volunteer Skills Fair provided important information for those who volunteer in the acute care setting, and demonstrated measureable knowledge gains.

FlightCare Emergency Training
FlightCare team members moved their simulated emergency training from the Rural SimCenter to the FlightCare helicopter to practice in a more realistic setting.

Colon Cancer Risk Assessment
Genetic counseling and testing for patients with high-risk family histories can improve identification and screening of those with higher personal risk for colon cancer.

Radial Artery Access for Coronary Angiography
Use of the radial artery in the arm, rather than the femoral artery in the thigh, for coronary artery studies may improve patient satisfaction and decrease some complications.

Guest Services Spanish-English Translation Board
A Spanish-English board with commonly used phrases helps volunteers assist Spanish-speaking guests and create a welcoming environment.

Yo soy un... (I am a...)

Paciente
(Patient)

Visitante
(Visitor)
**Heated High-Flow Nasal Cannula**
The heated high-flow nasal cannula allows delivery of a higher concentration of oxygen at a lower, more comfortable flow rate.

**Honoring Ceremony**
In the critical care units, this ceremony offers words and aromatherapy to honor the life of a patient who has recently passed away.

**Safety Huddles**
Surgical Services holds team huddles to improve communication and patient safety.

**Preparing for Obstetric Emergencies**
Caregivers from multiple clinical areas, including Obstetrics, Trauma Services, Emergency Department and Pediatrics conduct regular simulations to prepare for rare but critical obstetric emergencies.

**Nursing Collaboration**
Medical-surgical nurse managers meet regularly to promote excellence in nursing through education, collaboration and specialty certifications.

**Excellence in Emergency Dispatch**
The emergency dispatch team embraces the highest industry standards to improve timely and effective emergency response.

**Critical Care Donor Flag**
To honor those who give the gift of life through organ donation, Enloe’s Donor Network flag is flown at half-staff and the donor’s family or loved ones are given a Donor Network flag to fly in memory of the donor.

**Information Services Integral to Quality**
Information Services promotes high-quality medical care throughout the organization by responding to over 33,000 service requests in 2016 and working on the transition to the new Epic electronic health record.

**Innovative Education**
Multiple care units collaborated to present Skills Fair education integrating Planetree patient-centered care, hand hygiene and quiet hospital elements.

**Journey to Gold**
With an average of 14% more patients since receiving the Planetree Bronze Recognition for patient-centered care in 2013, Enloe maintains high patient satisfaction while pursuing Gold designation in 2017.

**Updated Emergency Response Guidelines**
Teaching programs were updated in 2016 to reflect the newest American Heart Association recommendations for adult and pediatric emergency responses.

**Preparing OB and Perinatal Nurses**
Nurses prepare to handle challenging obstetric and neonatal situations through skills practice at the Rural SimCenter and specialized orientation and education.

**Patient-Centered Care Advisory Council**
PCCAC is a multidisciplinary team that leads patient-centered initiatives such as Care Partners, White Rose Companions and patient-friendly billing.
Create an Accurate Timecard
Payroll helps staff with tips to accurately create timecards so that payroll is smooth and efficient.

Pediatric Interdisciplinary Committee
This committee meets monthly to improve pediatric care throughout the medical center.

Patient Identification for Safety
Recognizing that correct patient identification is crucial for safe care, pre-operative caregivers place an identification band on patients before bringing them back to the pre-op bay.

Ensuring a Safe Environment
Because health care workers are at high risk for workplace violence, education and policies were put in place to protect caregivers and patients.

Procedural Care Unit
The PCU provides a convenient unit for outpatient procedures and post-procedural care, improving patient experience and timely flow throughout the hospital.

Assessing Patient Health Literacy
The Patient and Family Advisory Committee sponsored a patient survey to determine opportunities to improve communication with patients about their health.

Skills Fair
Each fall, caregivers learn valuable information to improve the quality of care. In 2016, over 1,400 attended the nine days of Skills Fair events.

Pulmonary Function Department
The Pulmonary Function department relocated to the Enloe Rehabilitation Center with state of the art testing equipment and expanded patient access.

Timely Diagnosis of Serious Infections
A new testing system allows for rapid diagnosis of many different causes of central nervous system infections, enabling timely decisions about specific therapy for these serious infections.

Quality You Can See
Print Services creates print materials scaled for readability, with easy-to-follow information in a simple, uniform design aesthetic that improves the quality of patient care.

Reducing Radiation Exposure
Neurosurgery and emergency physicians adopted evidence-based recommendations for head and spine CT scans, which resulted in less radiation exposure for patients.

ED Talks
Based on the “TED Talks” concept that promotes “ideas worth spreading” in a short presentation, ED staff and physicians share impactful topics with the department on topics from brain attacks to nutrition.

Skin Integrity Management
A new skin integrity policy and practices were implemented to improve protection of healthy skin and treatment of skin wounds.
Smart Catch
A “smart catch” is identification of a potential error before it reaches a patient. Looking for smart catches and using them as an opportunity to improve care results in better patient safety.

Supporting Surgical Care Every Day
Sterile Processing department serves about 28 departments, including supplying the operating rooms with sterile equipment necessary for surgical procedures.

Continuing Education
The Enloe Education Center presented 10 symposia and four review courses, in 2016. Over 1,000 attendees learned about topics including trauma, wound care and oncology.

Vascular Access Nurse Rounding
The Vascular Access department implemented daily rounding on all central intravenous access lines to reduce infections associated with these devices, with a goal of eliminating these infections altogether.

Total Joint Replacement Program
Performing over 600 total joint replacements in 2016, this patient-centered program continually works to improve patient experience and has reduced the post-operative length of stay from 3 days to 1.9 days.

What’s Wrong with My Patient?
The Medication Error Reduction Plan Committee created a Skills Fair station where nearly 1,000 licensed staff were challenged to identify common sources of medication errors.

Top: Window washers dressed as super heroes delighted patients of all ages.
Below Left: Yellow Lab “Enloe” is being trained as a cancer-detection dog.
Below Right: Cardiac rehabilitation participants benefit from monitored exercise as part of the Enloe Heart Program, which advanced several quality initiatives this year.
**Sterile Processing Department**

The Sterile Processing department’s mission is to provide a quality sterile product each and every time.

**Waste Management**

Enloe participates in programs to reduce the impact of pharmaceutical waste on the environment.

**Telemetry Utilization**

In conjunction with a redesigned nursing unit structure, heart monitor (telemetry) orders were rewritten to incorporate American Heart Association recommendations, resulting in reduced telemetry utilization in the weeks after implementation.

**Prompt Care Communication**

A nurse high-alert call and notification list identifies patient needs and whether they are appropriate for that clinical setting.

**Spirit of Planetree Awards**

Recognized for outstanding patient-centered care in 2017 were Denis Westphal, MD, Physician Champion Award; Christy Sanders, RN, Caregiver Award; and Value in Action, Program Award.

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**Emergency Department Medication Safety**

A pharmacist review of computer-entered medication orders improved medication safety in this very busy clinical area.

**Value in Action Program**

The VIA Program works collaboratively to evaluate new supplies, medications and technology with the aim of improving quality while lowering supply expense per adjusted patient day to a seven-year low in 2017.

**Long-Bone Pain Management in the Emergency Department**

Working diligently to improve the timeliness of pain medication administration for long-bone fracture patients, Enloe’s Emergency Department now beats national benchmarks for this important metric.

**Mean Time to Pain Management for Long-Bone Fracture**

![Graph showing mean time to pain management for long-bone fractures from Q1 2012 to Q4 2016, with a national average of 50 minutes and the Emergency Department's times below this average.]

*Value in Action Program members pose with their Spirit of Planetree Award.*
Automated High-Level Disinfection
Automated, rather than manual, high-level disinfection of probes used in a number of procedures is faster and more efficient, effective and user-friendly.

Medication Safety
The Medication Error Reduction Plan Committee implemented monitoring, education and process improvement to reduce instances of “wrong patient” medication errors by 57%.

Transporting Blood on FlightCare
FlightCare uses a soft-sided cooler to transport blood products with critically ill patients, keeping these therapies at the optimal temperature and allowing unused blood products to be returned to the blood bank rather than discarded.

Reducing Readmissions
The Transitional Care Coordination Team identifies patients at high risk for readmission and contacts them for at least 30 days to ensure their medical needs are met. With this effort, Medicare patients’ COPD and pneumonia readmissions rates have decreased yearly since 2015.

Medicare Pneumonia Readmissions Within 30 Days

Central Line-Associated Blood Stream Infection (CLABSI) Reduction

Enloe follows the Plan-Do-Study-Act quality improvement model: evaluate current performance and design possible process changes (Plan); carry out the changes (Do); assess the impact of the changes (Study); and use the new information to further refine processes (Act). When CLABSI outcomes were excellent, monitoring continued.

When results trended in an unfavorable direction, clinical teams took action. They implemented new approaches to care and patient outcomes improved. Enloe is committed to this dynamic journey of quality improvement.
In 2006, Enloe committed to creating a patient-centered culture, one that would be experienced at each touchpoint throughout the organization. Since then, patient-centered care has become embedded in every decision that is made, from the design of clinical spaces to recognizing Stories of Excellence that represent the exceptional human interactions that personalize care.

In 2013, Enloe received Planetree's Bronze designation for Patient-Centered Care in acknowledgement of progress made towards its patient-centered care goals. In 2017, Enloe is prepared to demonstrate the organization’s further achievements in its quest to achieve Gold designation.

At this year’s Quality Summit, attendees were asked what word best answers this question: “What does quality look like at Enloe?”

Three initiatives form the backbone of the 2017-18 quality improvement year.

**Epic Implementation**
Effective health care exists along a continuum. It bridges the inpatient and outpatient worlds and requires robust information sharing. Throughout 2017 and into 2018, Enloe will lay the foundation for the integrated health record system, Epic. Epic creates seamless information sharing among clinicians and allows patients greater access to their own health information. The transition will be completed in spring 2018.

**Medication Safety: Use of Anticoagulation Medications**
New medications are available to treat conditions requiring anticoagulation, such as deep vein blood clots and the irregular heart rhythm called atrial fibrillation. This quality initiative will implement evidence-based guidelines for the safe use of these new therapies and educate clinicians on their most appropriate use.

**Enhanced Recovery After Surgery**
Studies show that specific interventions can improve the experience and outcomes of perioperative patients. Called Enhanced Recovery after Surgery (ERAS), these steps improve pre-operative readiness by optimizing a patient’s nutritional status and reduce post-operative nausea and pain.
The result was inspiring. Words like “collaboration” and “caring,” “teamwork” and “safety” quickly rose to the forefront, along with “patients,” “family” and “smiles.” By creating a patient-centered culture, Enloe has created a kinder culture that stands firmly on the 10 components of Planetree: Human interaction; friends, family and social support; access to information; healing environments; food and nutrition; arts and entertainment; spirituality; human touch; complementary therapies; and healthy communities.

As Laura Gilpin, an early Planetree pioneer, pointed out, the “rocket science” of health care is often easier to achieve than the person-centered and patient-centered elements. At Enloe, we strive to infuse patient-centeredness into everything we do, and when we succeed, we fulfill our mission: to improve the quality of your life through patient-centered care.

“It’s too bad patient-centered care is not rocket science, because if it was, we would be really good at it.”
– Laura Gilpin, Planetree Pioneer

For more information about quality initiatives at Enloe Medical Center, contact Marcia Nelson, MD, MMM, CPE, FAAFP, FAAPL Vice President, Medical Affairs (530) 332-5414 or email: marcia.nelson@enloe.org.
Our Mission

To improve the quality of your life through patient-centered care