



Empirical Quality Outcomes

"I have worked for Kaiser Permanente in the Sacramento Call Center for 21 years. We have evolved over that time to become a great benefit for patients and employees. Call center nursing is more than advice nursing; it is really telephone triage nursing. We are able to triage, provide advice, determine if the member can be treated by phone, and get patients to the right place for care if needed. This is because of how connected Kaiser Permanente is with KP HealthConnect and the ability to conference with a call center physician for complicated or challenging calls."

Kathy Kerth, RN, staff nurse II
Sacramento Appointment and Advice Call Center

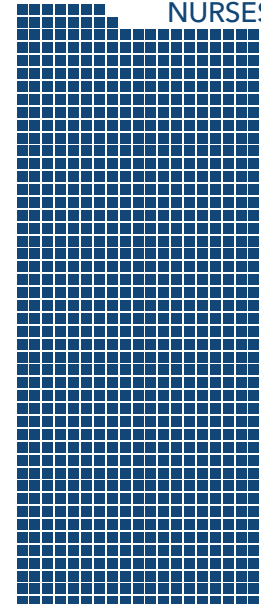
A Collaborative Approach Between Registered Nurses and Physicians to Provide Evidence-Based Exceptional Care

By Patricia Padilla, MD, clinical director Vallejo Appointment and Advice Call Center, and Family Medicine physician, Santa Rosa Medical Center

 **3.5**
MILLION
PATIENT CALLS

218,602
TELEPHONE
TREATMENTS

915
AACC
NURSES



The Permanente Medical Group's Appointment and Advice Call Center (AACC) increases access to consistent, high-quality care, supporting patients and physicians. In 2018, AACC nurses facilitated 218,602 telephone treatments for our patients. Member and patient satisfaction scores reflect high levels of satisfaction with this expedited level of care. Among the benefits of receiving care through the AACC, patients appreciate not having to drive to the medical center, miss work, or find childcare. They value the evidence-based, proactive, TPMG-approved clinical advice the AACC nurses provide.

Excellence in Telehealth

Kaiser Permanente Northern California has raised the bar for telehealth. Much of our success traces back to 1997, when we established the Appointment and Advice Call Center. This center leverages our integration and size to provide timely, consistent, and efficient services to members, around the clock, every day.

Today, the AACC manages clinical calls for all of KP Northern California's adult and family medicine, women's health, pediatrics departments, and international travel services, as well as most optometry and occupational health departments. Our innovative model allows nurses to provide advice, book appointments, or consult with a call center physician if necessary. In 2018, our 915 AACC registered nurses provided care for nearly 3.5 million patients over the phone.

The Call-In Experience

When a patient calls in to describe a clinical symptom, a nurse reviews the patient's electronic medical record. Open-ended questions are guided by physician chief-approved and evidence-based protocols to provide an assessment. Nurses use critical thinking to offer telephone treatments for common urgent medical complaints, including urinary tract infections and conjunctivitis. Call Center medical doctors are readily available on a virtual basis to consult when callers may require more extensive treatment or referrals.



Molly Malone, RN, staff nurse II, Sacramento Appointment and Advice Call Center.

“The doctor said the call center advice nurse [Kathy Kerth] saved my life.”

—Patient Daisy Award Submission

The Value of an Advice Nurse

A patient sent in a nomination for the highly coveted DAISY Award, for one AACC nurse, writing, “She saved my life.” This patient had a history of Coumadin use and had sustained a head injury. Kathy Kerth, RN, the AACC nurse who received his call, identified that something was wrong and urged him to act immediately. Convinced, the patient went to the ER that day, where he was diagnosed with a traumatic subdural hematoma.

“The doctor said the call center advice nurse saved my life,” he shared. “If I had not come in right away, I could have died. One should never underestimate the value of an advice nurse.”

MY MEDICATIONS MATTER

Improving Results in Medication Communication Across the Region

By Mary Linda Rivera, ND, RN, regional director Care Experience
Julia Loughlin, senior consulting associate, Operational Excellence

We know that communicating with patients about their medications is a critical part of a safe medical experience and improves overall outcomes. In April 2017, Kaiser Permanente Northern California assembled an interdisciplinary, multi-facility care team to establish a consistent, best practices-based approach for improving results in the region’s medical communication. The outcome was My Medications Matter, an initiative that optimizes communication among entire care teams and patients regarding the purpose and side effects of their medications.

My Medications Matter has had success in the Maternal Child Health service line, where the initiative contributed to an improvement in overall 2018 HCAHPS Medication Communication Composite score ratings. My Medications Matter was also expanded into Adult Medicine Units in early 2019.

What Is My Medications Matter?

The core of My Medications Matter is consistent communication from every member of the care team when medication is discussed. Consistent communication is encouraged through the use of practices, including Ask 3 Teach 3, Teach Back, and use of the term “side effects.” The intent is to open a dialogue with patients about their medications. The care team enhances communication with a medication side effects information sheet, creating a visual reminder for the patient.

My Medications Matter is one of the region’s first Exceptional Care Experience initiatives in our hospitals. It represents a broad, multidisciplinary

collaboration by physicians, nurses, and pharmacists to bring best practices to life.

Early Wins with My Medications Matter in Childbirth Units

In mid-2018, the regional My Medications Matter team partnered with Sarah Mandel, MD, and the Maternal Child Health Care Experience Collaborative to roll out the My Medications Matter bundle of practices across all Kaiser Permanente Northern California Maternal Child Health units.

Guided by a playbook the My Medications Matter development team created, medical centers took the following key steps: They established a multi-disciplinary team with nurses, physicians, and pharmacists; ensured the care providers are fully educated on the practices; and engaged in a test-and-learn period to refine the workflow.

The results speak for themselves: The entire Northern California Maternal Child Health program raised its overall 2018 HCAHPS Medication Communication Composite score from 4 to 5 (out of 5) stars. Five participating sites gained 1 star and 6 sites held constant at 5 star ratings over the previous year.

“The most exciting aspect of focusing on medication side effects during the last performance year was the strong collaboration our service line developed with both Pharmacy team members and our own front-line nurses,” said Pamela Emmert, a Care Experience practice leader from Kaiser Permanente South Sacramento. “This partnership was essential in maintaining the overall success of our performance year 2018 results.”

The South Sacramento staff were dedicated to raising medication awareness and consistently improving communication with patients/families during their stay, Emmert said. “Department leadership committed to consistently engaging with patients during rounding



Shea Alvarado, RN, staff nurse III, and Alisha Redhouse, RN staff nurse II, South Sacramento Medical Center.

to assess the level of staff engagement during their stay, confirming the presence and use of our tools, and providing performance coaching with staff if needed. Our physicians have also joined our movement and are implementing strategies to utilize the My Medications Matter platform to educate patients prior to delivery of medications in the clinic setting. Our goal in performance year 2019 is to continue to maintain the 5-star HCAHPS rating our team has worked so hard to achieve!"

Ashu Goyal, MD, Northern California physician lead for My Medications Matter, agreed. "I feel really proud that as an organization we have developed a body of work that encourages all of our physicians, nurses, and other team members to collaborate together in having effective conversations with our

"As a nurse and professional educator, I believe that the emphasis on engaging our patients on potential medication side effects not only fulfills our professional nursing responsibility to the patients we serve, but also contributes to both the highest level of quality of care and patient safety."

—Alisha Redhouse, MSN, RN, staff nurse II
South Sacramento Medical Center

"One of the main benefits of the new My Meds Matter education focus is how it promotes improved communication between the caregiver and the patient, as well as ensuring that the patient is better able to manage their plan of care and overall health. Ultimately, as nurses, we feel more confident that our patients can go home and enjoy motherhood!"

—Shea Alvarado, BSN, RN, staff nurse III
South Sacramento Medical Center

patients and their family members," he said. "Patients knowing about their medications is a basic patient safety right, and it's rewarding to know that our physicians and nurses are partnering and taking the time to do the right thing and involve our patients more in their care."

Plans for Adult Services Expansion in 2019

Many other units are also seeing promising results. Amy Young, MBA, BSN, RN, chief nurse executive at Kaiser Permanente Redwood City, which was an early pilot site, reports My Medications Matter has contributed to maintaining their medication communication results.

"The positive feedback we have received from our patients and families is a testament to our Nurse Champions who have led this work, and to all nursing staff who continue using the evidence-based practices," Young said.

Baby Orsua, BSN, RN, nurse manager in Adult Medicine at Kaiser Permanente South Sacramento, noted "My Medication Matters starts the connection right away with patients and family when we talk about medications and medication side effects. Trust is solidified when staff takes the time to explain and listen during this trying time for our patients and their families."

Enhancing Patient Safety by Proactively Identifying Risk for Deterioration

By Shirley S. Paulson, DNP, MA, RN, NEA-BC, regional director clinical adult services
Elizabeth Scruth, PhD, MPH, RN, FCCM, CCNS, CCRN, clinical practice consultant
Laure Lisk, MS, BSN, RN, CPHQ, CPHRM, strategic implementation leader

Predicting today who will be in the ICU tomorrow is the premise of the Advance Alert Monitor (AAM) program. AAM is a predictive model that gives us a 12-hour lead time to identify patients who are at risk of clinical deterioration. Developed by the Kaiser Permanente Northern California Division of Research under Gabriel Escobar, MD, the AAM program has been implemented at all 21 Kaiser Permanente hospitals in Northern California.

AAM Leverages Clinical Experts

AAM enhances patient safety and outcomes by proactively identifying patients at risk for clinical deterioration. Patient chart data is scanned by critical care RNs at a secure command center, called eHospital. Data is reviewed on an hourly basis for alerts greater than or equal to 8 percent, indicating patients at risk of deterioration within 12 hours. When an alert greater than or equal to 8 percent is found, the eHospital nurse notifies the local Rapid Response Team (RRT) RN and communicates the alert and pertinent clinical information. The RRT RN then works with the primary RN to assess the patient, obtain a new set of vital signs, and call the physician for stabilization.

Success has been realized through the efforts of our regional team which consistently implemented AAM, worked with front-line staff to develop solid workflows and documentation, and involved social work and palliative care partners to proactively address our patients' wishes and decision making.

Because interventions are now occurring before rather than after patient deterioration, full Rapid Response and Code Blue calls have been avoided, and patient mortality rates have improved. Results also show that if a patient needs to be transferred to the ICU, their overall length of stay in the ICU is reduced.

RRTs in Action with AAM

Chelsea Carrera, RN, staff nurse III from Kaiser Permanente Santa Rosa, describes herself as a "Proud RRT/Code Blue RN" and relates this powerful story that converted her into an AAM believer:

"A patient diagnosed with bilateral Pulmonary Embolus (PE) and sepsis/pneumonia was admitted to my floor from the Emergency Department. As I helped her get settled and started her orders, I noticed she was awake and alert, with some dyspnea



Chelsea Carrera, RN, staff nurse III, and Paul Castaneda, RN, assistant nurse manager, Santa Rosa Medical Center.

on exertion. She was placed on our AAM list and I turned her over to the night AAM RN.

“When I returned the following morning, I learned that her condition had worsened and she was in severe respiratory distress. We contacted her primary MD and transferred her to the ICU. After less than 6 hours, she returned to us awake and oriented, breathing easy, and eating.

“I believe the AAM program contributed to saving my patient’s life. If she hadn’t been placed on the AAM list, it’s possible we may not have been as quick to identify her deterioration. The tool in general helps us quickly identify the sickest of the sick and give them a softer landing into our ICU.”

Alex Dummet, MD, clinical lead for AAM describes Chelsea’s story as “reflecting the positive impact of using predictive analytics to communicate a patient’s risk for deterioration within the team, rapidly re-assess their condition, and escalate care proactively, rather than reactively.”

e-Hospital RNs a Critical Aspect of AAM

Elizabeth Scruth, PhD, RN, an eHospital nurse and member of the Regional Clinical Effectiveness team believes “the most important component an eHospital nurse can contribute is their clinical

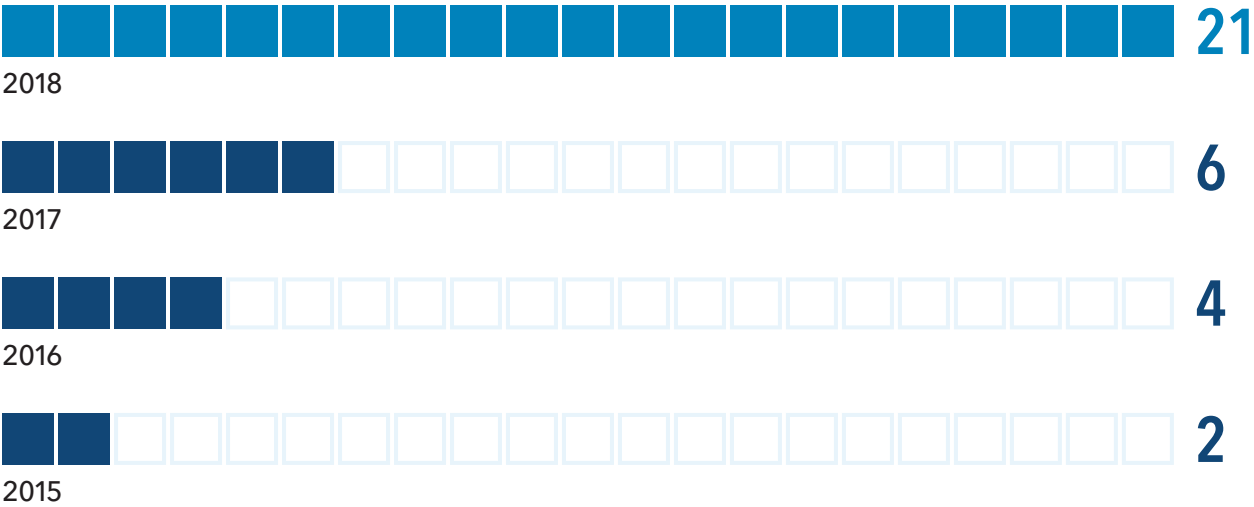
background and aptitude for analytical inquiry. Their ability to navigate a chart, see through the lens of both the rapid response team (RRT) nurse and the provider, and clearly communicate analyses makes the collaboration a success.”

Michael Purnell, MSN, RN, CCRN, NVRN, CNRN is one of eHospital’s quality nurses and sees first-hand the impact that AAM has on improving patient care. “Each week I work as an AAM RN, it’s an experience like none other. At least once a week, I see patient care improved because Kaiser Permanente has invested in this system to provide early and advanced alerts to nurses and physicians about patients who are at increased risk of decompensation.”



Though AAM has proved an unqualified success, it does not replace clinical judgement. It relies on a multidisciplinary approach to save lives and help improve the care for the sickest members at Kaiser Permanente. With more

than 169 lives saved thus far in implementation, early results are promising.



AAM Expansion Through 21 Medical Centers

ENHANCED RECOVERY

Transforming Surgical and Medical Care for Patients Across the Continuum

By Pearl Paras, MPH, BSN, RN, CNOR, CPHQ, clinical practice consultant, Enhanced Recovery mentor
Shirley S. Paulson, DNP, MA, RN, NEA-BC, regional director Clinical Adult Services

Kaiser Permanente Northern California’s Enhanced Recovery (formerly ERAS, Enhanced Recovery After Surgery) is a comprehensive post-operative recovery improvement protocol. This program – the only one in existence – improves surgical outcomes, reducing risk of harm to the patient by as much as 45 percent.

Streamlining Processes, Improving Outcomes

The Enhanced Recovery program reduces mortality rates, post-operative complications, and the use of opioid painkillers, while improving patients’ rate of recovery. From its inception in 2014, the program has grown from 2 pilot programs to include 90 percent of all Kaiser Permanente Northern California inpatient surgeries in 2017, tripling non-OB volume to more than 65,000 cases per year.

The program has consolidated recovery-related practices before, during, and after surgery into a “common pathway” for optimal post-operative recovery. The pathway focuses on practices such as pre-operative carbohydrates, multimodal analgesia rather than opioids, early nutrition and ambulation, and patient education. Each of these key elements support faster recovery, improved pain management, and patient satisfaction.

A Collaborative Effort

In 2014, the Enhanced Recovery team, led by Derrick Lee, MD, initiated an effort to streamline processes and improve post-operative outcomes. This team designed surgical pathways for 2 common procedures (hip fractures and colorectal). They

consolidated practices, combining them into a “common pathway” for optimal recovery.

The pilot was implemented at Kaiser Permanente Roseville and San Jose Medical Center. Then, in 2015 the pilot’s success prompted expansion to all total joint procedures. This was followed by C-sections, complex urological, gynecological-oncological, and thoracic procedures in 2016. By 2017, mortality rates had dropped, post-operative complications declined by 17 percent, opioid painkiller use decreased, and recovery time improved.

Over the past two years, the Enhanced Recovery team has partnered with subject matter experts from across nearly all medical specialties to consolidate best practices into a common pathway for surgical care. The common pathway was successfully piloted at Kaiser Permanente South Sacramento and Fresno Medical Centers. Today, 90 percent of all inpatient surgeries leverage the evidence-based benefits of the Enhanced Recovery program.

Outpatient Expansion

With the program’s success for inpatient surgeries, November 2018 also saw the expansion of Enhanced Recovery to Outpatient Surgical Services. This is the largest expansion to date, more than doubling the number of patients experiencing the program’s benefits. Implementing this significant milestone required examination of workflows, staff problem solving, and modifications to integrate an even more streamlined process.

Collaboration by outpatient nurses, staff, and leadership was also critical to the success of Enhanced Recovery. Special recognition goes out to program mentors Christina Keny, MHA, BSN, RN, and Pearl Paras, MPH, BSN, RN, for being the “boots on the ground” to support our outpatient physicians and nurses to make this expansion so successful.



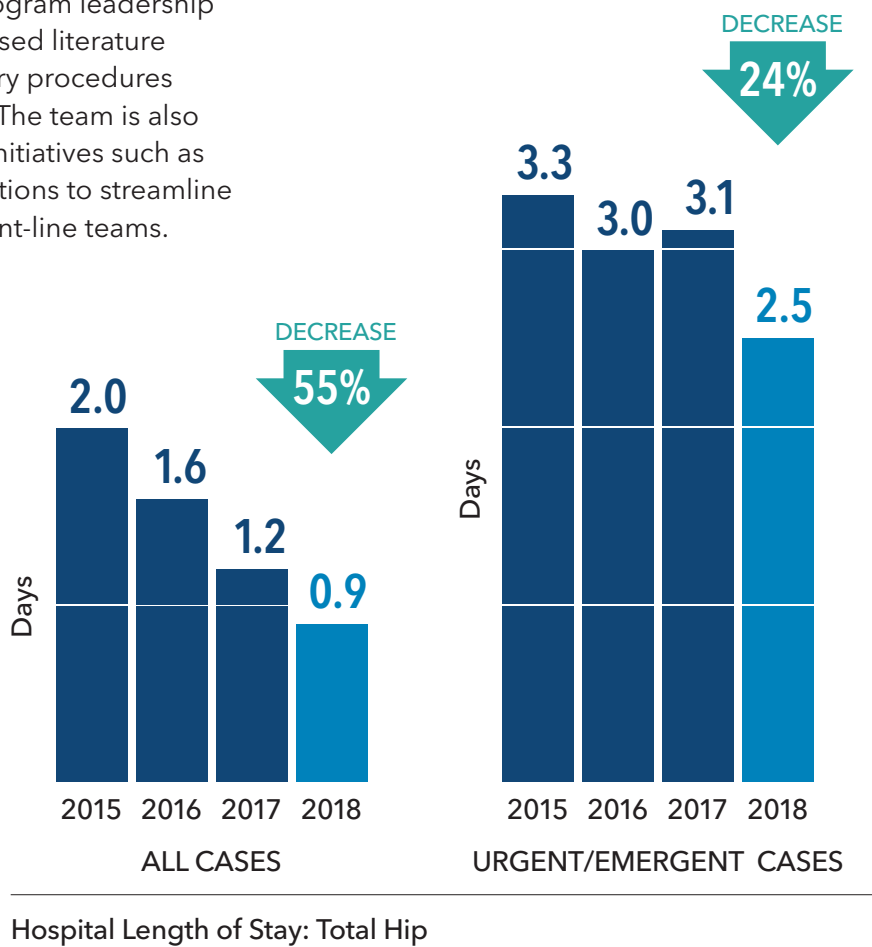
Santa Rosa Medical Center interprofessional team members consult with a patient in intensive care.

Next Steps for 2019

In 2019 the Enhanced Recovery program will expand to the hospitalized medical population. The program leadership team is actively researching evidence-based literature as it enters a realm of pioneering recovery procedures that are leading the industry worldwide. The team is also coordinating with other hospital-based initiatives such as Delirium, Mobility and Surgical Site Infections to streamline implementation and sustainability for front-line teams.

ENHANCED RECOVERY OUTCOMES

We measure many facets of how Enhanced Recovery improves outcomes. In this example, Enhanced Recovery principles reduced length of stay for Total Hip patients. Enhanced Recovery also reduces opioid use and post-operative complications.



IMPROVING PATIENT SATISFACTION

A Staff-Led Approach to Advancing Care in the Emergency Department

By Patrick Lamb, MSN, RN, emergency department director Manteca Medical Center

Emergency departments are challenged to adapt to overcrowding by creating or moving services to alternative spaces while maintaining focus on the patient. The Kaiser Permanente Manteca Emergency Department has met this challenge. As a small community-based emergency department, resources are managed strategically to treat approximately 39,000 patient visits annually.



Identifying the Potential

The foundation of providing an excellent patient experience starts with focusing on what is in our circle of control. In Manteca’s Emergency Department (ED), attempting to control the space and patient census seemed monumental, but using creative problem solving to design nimble workflows felt achievable. The challenge we needed to solve was to facilitate immediate care to lower-acuity patients without stressing resources for the acutely ill.

The Central Valley ED management team challenged staff to identify opportunities to improve the patient care experience by addressing our increasing census and space constraint. Working collaboratively, staff proposed we focus efforts more strategically on our lower acuity patient population, and redesign workflows based on throughput and improved patient communication.

An Interdisciplinary Effort

An interdisciplinary care team proposed creating a nursing role tasked with overseeing the lower acuity patient population. This individual would greet each patient upon presentation in the lobby

“It is a wonderful idea that enhances the flow of the department and assists with excellent patient care by allowing early physician contact with patients.”

—Kassandra Cooper, MD
Manteca Medical Center

and, in partnership with the pre-assigned provider, initiate a treatment plan long before the patient was assigned a room. Introducing this parallel process of assessment and treatment required scripted communication and numerous updates throughout the patient’s stay. Nurses would remain engaged by rounding throughout the waiting area and frequently updating patients and their families until either the



Mandy Serrano, RN, staff nurse II, and Marta Madrid, LVN, licensed vocational nurse, discuss the plan of care for patients in the emergency department at Manteca Medical Center.

patient was placed into a room for continued care or discharged by the care team. Once the strategy was implemented, patients began reporting a decrease in their overall length of stay.

Building a successful new process required review of workflows related to arrival, initiation of care, and discharge. Each step was evaluated to determine whether it was patient-centered and added value. Staff were immediately motivated to contribute to this process improvement because it directly reflected their efforts in care delivery. As a result, they were able to reorganize the utilization of patient rooms and identify additional adjacent spaces to support rapid turnover of low-acuity patients during the assessment and discharge process.

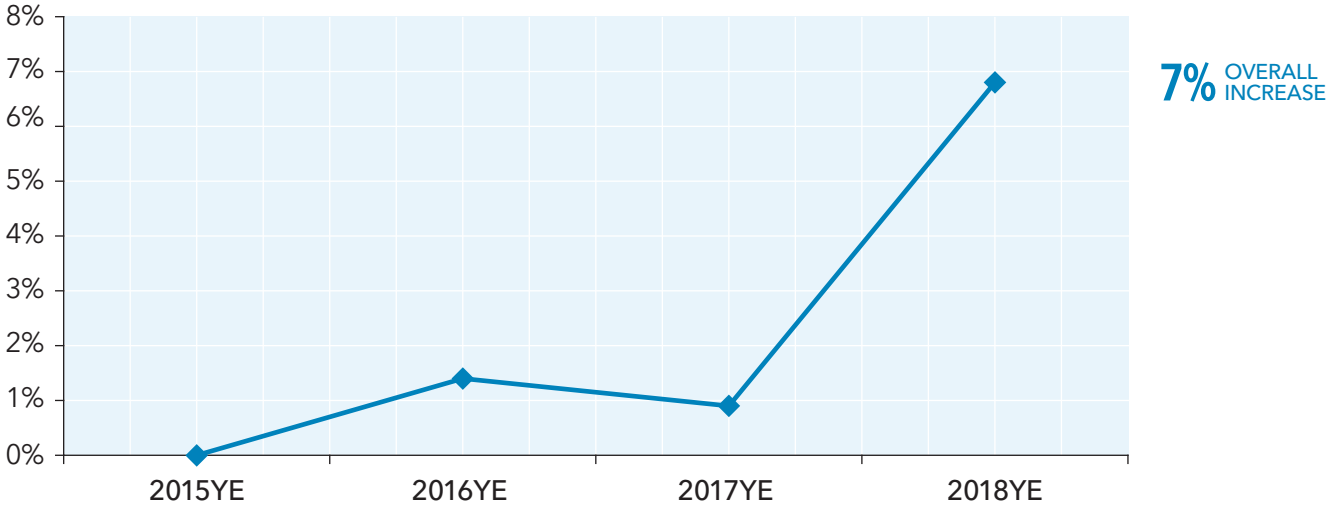
By design, the system supports placing the provider in front of the patient as soon as possible, so that all orders may be submitted at the onset of the encounter. Patients are moved intermittently in and out of rooms during the interview, assessment, and re-evaluation phases of the visit, while the team continues to build momentum for discharge.

“I love the Care Boards. I use them to write updates for patients so they know what’s scheduled next in their care”.

—Jennilyn Abella, RN, staff nurse II
Manteca Medical Center

Improving Provider-Patient Communication

Additional efforts were taken to increase communication during this improvement process. Nurse Knowledge Exchange and Patient Care Boards were implemented to provide



Change in percent of patients who rate staff excellent in courtesy and helpfulness

everyone involved in a patient’s experience with comprehensive details of their visit. Both bedside tools support communication for all acuity levels by guaranteeing the care team is properly introduced to patients and their families. Care Boards further enrich communication by identifying associated risks (such as allergies and falls) along with expected next steps in the care plan. This information is meant to be real time, interactive, and continually updated depending on the progression of the patient.

While addressing capacity challenges in Manteca, the staff also positively impacted Member

Patient Satisfaction (MPS) scores. In 2018, the MPS performance in percent of patients who rated staff excellent in courtesy and helpfulness has increased significantly, from 56.0 at year-end 2017 to 61.0 at year-end 2018. Staff rose to our challenges and led changes by identifying and improving parts of the patient care experience they were able to control. Working together, they applied process improvement principles to address unique space challenges, reexamined throughput workflows, and enhanced communication throughout patient experience.



Members of the Manteca Medical Center Emergency Department team.