



SUMMARY



Customer

Banner Ocotillo Medical Center
Chandler, Arizona

Partner

Oracle Health,
Zebra Premier Solution Partner

Industry

Healthcare

Challenge

Centralize employee communication and patient response on a single all-in-one enterprise-class mobile device

Benefits/Outcomes

- Cut patient wait time by 50%
- Reduced the average hospital stay time to 3.38 days
- Achieved sepsis compliance of 86% with turnaround time of 6 minutes
- Improved the average response time by 50%, bed exit 17 seconds and staff assist 1.05 minutes
- Virtually eliminated patient falls

Solutions

- Zebra TC52-HC mobile computer
- Oracle Health CareAware Connect

Elevating Care and Accelerating Treatment with Clinical Mobility

Banner Health enables a future-forward mobile healthcare environment, streamlines workflows and improves patient outcomes.

With 30 acute care and critical access hospitals, 60 urgent care locations, and over 200 physician clinics caring for populations across six states, Banner Health is a not-for-profit healthcare network driven by a simple commitment to “making healthcare easier, so life can be better.” As the organization grows, each new facility offers a fresh opportunity to build toward the future of healthcare.

Enabling Breakthrough Performance

For Banner Health, that means enabling every single team member with the tools they need to do their job — and do it well. When the 120-bed Banner Ocotillo Medical Center opened in late 2020, the organization needed to make investments in technology that supported a patient-obsessed and safety-first culture from the very start. Preparing to open with a new staff, Banner Health needed to implement an effective and intuitive clinical mobility solution designed for the needs of healthcare workers.

Amidst a second surge of the COVID-19 pandemic in Arizona, where Banner Health is the largest healthcare organization statewide, the team faced a uniquely challenging moment for the entire industry. This required devices and software that would be quick and simple to implement, rugged and easy to sanitize, and easy for nurses, doctors, and other hospital staff to learn and use on the go.

“My vision for Ocotillo was a full suite of technology that makes it easy for people to do their jobs and do them well, wherever they are,” says Helen Brogan, Chief Nursing Officer and Chief Operating Officer at Banner Health’s Ocotillo Medical Center in Chandler, Arizona. “You need those tools if you’re aspiring for that kind of patient care.”

All for One and One for All

Decision-makers found the organization’s missing operational puzzle piece in Zebra’s TC52-HC mobile computers, which were deployed to all clinical and ancillary teams across the hospital. “The TC52-HC was something that all of our team members could use,” says Brogan. “From EVS (Environmental Services) and culinary to our PCAs (patient care assistants), nurses and providers are all using that device.”

Combined with software from Oracle Health, a Zebra Premier Solution Partner, the handheld device keeps staff in constant communication. It also provides easy and secure access to patient information. With a device in nearly every employee's hands, Banner Health is enabling efficient collaboration across the facility, reducing manual errors, and helping to improve patient experiences.

"Everyone in the facility has the Zebra device – it's actually part of the uniform," says Trisha Mitrzyk, Charge Nurse and Relief House Supervisor at the Banner Ocotillo facility. "It's an expectation to have it on you at all times."

Confronting Long-Standing Challenges

It is a pivotal moment for the healthcare sector. Even before the COVID-19 crisis, the healthcare sector was overburdened and understaffed. Despite this, patient expectations are higher than ever. Caregivers are working around the clock to meet patient demand for more transparency, greater access, and added convenience from the healthcare experience. The right enterprise technology is essential to streamlining hospital operations and maximizing the power of the existing workforce.

"Almost every facility in healthcare right now is challenged with two major components, and that is: having enough people to provide care, and then the resources to deliver that care in a way that is sustainable from a cost perspective," Brogan says.

Accessing Information on the Move

The right enterprise technology is essential to streamlining hospital operations and maximizing the power of the existing workforce.

"We need a central hub that allows us to communicate with each other and receive information in a mobile way," Brogan states, echoing the importance of clinical mobility. "Our team members are on the go. They're not sitting at a desk; they're up, moving around, going from unit to unit, from patient to patient. That's where the mobile device comes into play; it's that central hub that everything else plays into."

"The devices have enhanced our out-of-the-box thinking," says Danielle Graber, Director of Nursing for Banner Health's women and infant services. "Patients can be in the rehab gym, in the nursery visiting their baby, or even walking around and I don't have to delay starting their antibiotic or administering pain medication until they return to their rooms. Because I can take my mobile device and a patient's medication with me, I can safely administer the prescription wherever the patient is at any given moment."



One Month Snapshot



120

TC52-HC handheld devices deployed



37,000

texts



455

users



94%

Barcode Medication Administration (BCMA) average



79

average notifications per user

Graber continues, “I can scan meds, scan labs, even document a few things and talk with a provider, all on the same device. The devices are revolutionizing healthcare.”

Access to patient information is vital. The TC52-HC provides a secure and HIPAA-compliant platform for clinicians to view or update patient records in real time and receive critical alerts and test results, all without leaving the patient’s bedside.

“I can look at patient’s charts and labs and information about the patient while I’m actually on the floor,” says Joseph Wooster, Vascular Access Specialist at Banner Ocotillo Medical Center. “We need to be very time-efficient in what we do, so having this information on the go helps us deliver better care. I don’t have to go back to an office and log into a computer to pull up or update that information; I have it in the palm of my hand.”

Simpler, more seamless processes mean shorter delays and fewer workarounds for time-strapped clinicians. The TC52-HC’s built-in camera allows clinicians to take and upload photos of wounds and other injuries. Scanning and mobile printing capabilities help keep patients safe and prevent human error, allowing clinicians to perform positive patient identification for specimen collection or medication administration using a barcode at the point of care.

Building Better Communication Workflows

Clear communication is crucial within any hospital environment, but it can be challenging to manage in a system with so many moving parts. “Communication is the largest issue we had in general,” Mitrzyk says. “Communication between the doctors, communication between the nurses, the patients, their families, pretty much anyone that works in a facility like this. But it’s tough to make sure that it is done properly.”

At Banner Ocotillo Medical Center, the staff relies on the TC52-HC and Oracle Health CareAware Connect for HIPAA-compliant, secure text messaging and phone calls, which is faster than a pager and more discreet than a two-way radio. Non-clinical staff use the devices for inventory management and asset tracking. And by enabling every team member to communicate via the same platform, the hospital effectively breaks down siloes and minimizes time lost to non-essential tasks.



“Being able to get what you need when you need it immediately is huge. It’s very nice to have that right at your fingertips instead of having to wait 15 or 20 minutes.”

Trisha Mitrzyk, Charge Nurse and Relief House Supervisor, Banner Health Ocotillo Medical Center

When departments are interconnected, it streamlines patient care and eliminates delays in surgery, treatment and testing, reports Graber. “When a department receives a patient for testing or treatment, they can easily touch base with the bedside nurse and ensure that the patient is ready to go and that all the paperwork and preparation have been completed.” She continues, “Care is timely, and patients aren’t waiting an hour or more because things aren’t ready.”

“Being able to get what you need when you need it immediately is huge,” Mitrzyk says. “It’s very nice to have that right at your fingertips instead of having to wait 15 or 20 minutes.”

Avoiding Communication Breakdowns

In a hospital environment, the stakes are about as high as they get. Time is precious, particularly for staff working directly with patients. When hospitals are short-staffed and the patient influx is up, there is even more focus on making the most of every staff member’s time.

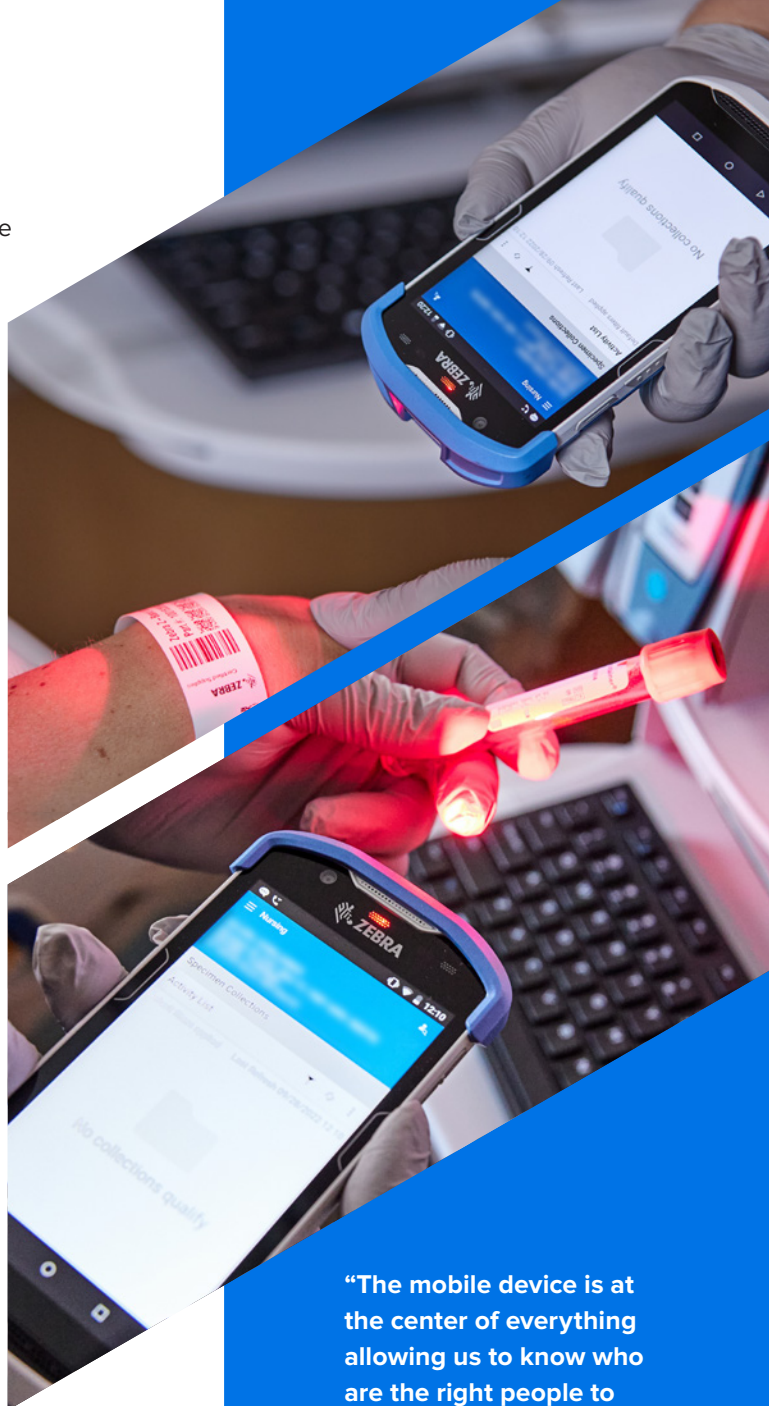
The TC52-HC is in action from the patient’s first entrance into the facility. At registration, a patient’s information is passed instantaneously to the care team. Devices are integrated with the hospital’s extensive EHR system. If a patient rings their call light or there is an issue like a fall alarm, the appropriate team member is notified immediately, directly on their device.

“The mobile device is at the center of everything allowing us to know who are the right people to communicate with: who are the people caring for this patient today? Who are my teammates and how do I communicate with them?” Brogan says.

Rugged and Up to the Task

The TC52-HC can handle the unique needs of the hospital environment. The handheld device can withstand multiple drops, with a body and screen that can stand up to constant cleaning and disinfection.

“We never appreciated how important it was going to be for having a rugged device that could be really thoroughly cleaned, that we could be comfortable and confident it could pass through many hands,” Brogan says.



“The mobile device is at the center of everything allowing us to know who are the right people to communicate with: who are the people caring for this patient today? Who are my teammates and how do I communicate with them?”

Helen Brogan, Chief Nursing Officer and Chief Operating Officer, Banner Health Ocotillo Medical Center

In addition, devices are often utilized non-stop, going from caregiver to caregiver at the end of each shift. Rather than stop to dock and recharge the device, workers can simply swap out the battery and keep on moving.

Enabling Tech-Smart Healthcare From the Ground Up

Banner Health established project KPIs related to reducing wait times and call transfers, increasing patient satisfaction and decreasing the time required to respond to events. The results have been remarkable. Banner Health effectively reduced wait time and turnaround time by 50%, reduced falls and decreased length of stay to 3.38 days. The TC52-HC also proved invaluable in enabling the hospital to achieve a sepsis compliance rate of 86% with a turnaround time of six minutes. Finally, Banner Health improved response time by 50% with bed exit at 17 seconds and staff assist to 1.05 minutes.

Healthcare's Partner for the Future

Perhaps more than any other sector, healthcare is emblematic of the transformative power of technology. New developments have shaped how hospitals are managed and care is delivered, from medication administration to task management. At the same time, much of the industry still needs to catch up on technology, limited by the perceived cost and complication of adopting new systems and solutions. Forward-thinking organizations are investing in improving patient care at the operational level, embracing clinical mobility across the entire workforce.

Banner Health recognized the importance of an intuitive, all-in-one device in transforming patient care. "I see how much the TC52-HC has streamlined workflows and eased communications across this facility, between departments, and among nurses and physicians," says Graber. "I can only imagine what the TC52-HC will do when every Banner employee has one, and we get these devices to every facility in the Banner network. It's a game-changer."

"I can only imagine what the TC52-HC will do when every Banner employee has one, and we get these devices to every facility in the Banner network. It's a game-changer."

Danielle Graber, Director of Nursing, Women and Infant Services, Banner Health

To learn more about how Zebra can help streamline your healthcare operations, visit zebra.com/healthcare.



NA and Corporate Headquarters
+1 800 423 0442
inquiry4@zebra.com

Asia-Pacific Headquarters
+65 6858 0722
contact.apac@zebra.com

EMEA Headquarters
zebra.com/locations
contact.emea@zebra.com

Latin America Headquarters
zebra.com/locations
la.contactme@zebra.com