

Vocera COVID-19 Use Case Library

Our Vocera® COVID-19 Response Task Force has compiled simple configurations of our technology that customers can use to make communication more efficient and potentially more effective in this pandemic. Some of these use cases were defined and put into production by our customers. Others come from our own ideas and experience. All begin by defining a scenario in which a customer would find themselves during these unprecedented times.

Our service and support teams at Vocera can help you implement many of these use cases at no cost if you don't have time or are not sure how. Large deployments of some more complex use cases may require a paid services engagement; ask about our special COVID-19 pricing promotions.

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Improve Capacity and Throughput with Safe Patient Flow

1. **Communicate safely and efficiently while wearing PPE.** Staff can wear the Vocera Smartbadge or Badge under PPE, with or without a wired or Bluetooth headset, to communicate safely throughout a shift and preserve PPE. Enable hot word detection on the Smartbadge so staff can say, “OK Vocera” to initiate communication completely hands-free. Staff receiving a message on the Smartbadge or Badge can say, “Play text messages” and the Vocera Genie will recite the message. Staff can respond to the message verbally using the “Record a message” command.



2. **Prepare ED staff for an incoming COVID-19 patient.** Configure your solution so EMS can communicate with ED staff while in transit with a suspected COVID-19 patient. Examples include an EMT using a Vocera smartphone app to call the ED charge nurse on his or her Vocera Smartbadge or smartphone app. The ED charge nurse can instruct the EMT to bring the patient to the negative pressure room and send an urgent broadcast to the incident response team (i.e., “Code 19: ETA 7 minutes, ED Bay 4”). Care team members can don PPE prior to the patient’s arrival.

3. **Safely admit and triage a walk-in patient who is possibly COVID-19 positive.** If a walk-in patient is showing COVID-19 symptoms, the triage nurse can send an Urgent Broadcast (i.e. “Code 19 Triage Area”) to the appropriate response team from their Vocera Smartbadge or Badge while wearing PPE.

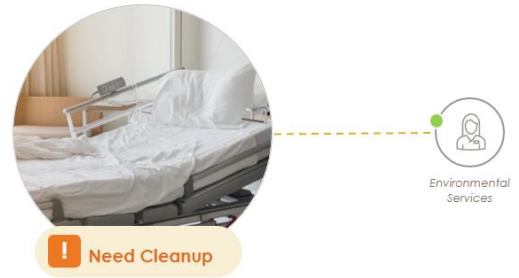
4. **Mobilize response teams.** Communicate urgent information quickly to a specific group, such as a COVID-19 response team, without overhead paging. A user can send a message using a Vocera template or place a call from their Vocera Smartbadge, Badge, or smartphone app. For example, an EMT en route to the hospital with a suspected COVID-19 patient can tell the COVID-19 response team they’re coming. The response team can then prepare for the incoming patient.



5. **Mobilize your COVID-19 leadership team.** Quickly communicate urgent information to your leadership group by configuring message templates. For example, send an urgent request to join a conference call, or updates on triage area backlog.



6. **Accelerate room turnover workflows.** Configure your system so that a bed cleaning request alert is sent to Housekeeping/EVS to clean the room as soon as staff enter patient discharge or transfer information into the electronic health record. Housekeeping/EVS receives a bed cleaning request on their Vocera Smartbadge or Badge and is prompted to verbally respond when the cleaning is in progress and complete. Responses from Housekeeping/EVS can automatically update the status in the electronic health record in real time.



Find People Easily in Quickly Changing Environments

1. **Offload the need to remember who's working on the COVID-19 team.** Use the On-Call Schedule feature for COVID-19 team scheduling. Hospitals using Vocera Collaboration Suite and the Vocera Messaging Platform Web Console can take advantage of the app's on-call scheduling feature. Hospital staff can easily send a message to the on-call group knowing that the correct users will get the message.
2. **Enable care teams to easily communicate with the right on-call providers in real time** by integrating QGenda on-call scheduling solutions with the Vocera Platform. Build and manage optimized provider schedules quickly. Easily create and manage consolidated on-call schedules. Make calls and send texts without needing to know names or phone numbers.
3. **Unify staff working in a multi-campus environment.** Address Book entries can be defined for specific hospital sites within a health system, or they can be assigned for the entire health system – the Global Site. By assigning roles and specialty information to entries in the Global Address Book, anyone within the health system can reach individuals by name, role, or specialty from their Vocera Smartbadge, Badge, or smartphone app. For example, a community-based physician whose patient is hospitalized at a health system's main campus can easily connect with the on-call physician of the team caring for the patient. Similarly, if a referring physician needs to locate and contact an appropriate subspecialist for a question or consultation, information within the directory can help speed that process.
4. **Enable instant communication with COVID-19 specific teams.** Enable users to quickly and easily call or send a message to all members of a COVID-19 response group. A variety of COVID-19 response groups can be configured from the Vocera Platform Web Console. Examples of groups you could set up include:
 - Vaccinators or pharmacists
 - Staff running supplies to isolation rooms
 - Staff distributing vaccines to vaccination areas
 - Staff responding to adverse vaccine reactions
 - Infection control team

5. **Make it easy for care teams to reach people in the community *outside* the hospital.** Add outside numbers to your Global Address Book on the Vocera Voice server. This will allow care team members to directly call the local department of health, surrounding hospital command center, infectious disease office, local clinics, another hospital or health system, and more – without needing to search for phone numbers or connect to a telephone.



6. **Allow Vocera users outside the hospital to reach users *inside* or *outside* the hospital.** In a time when more people are working outside of the hospital, configure your solution so users outside the hospital who are licensed for Direct Access can call a direct access number, use their name and password to authenticate, and use the Vocera Genie to call another Vocera user or a number in the Global Address Book on the Vocera Voice Server. This eliminates the need to ask an operator or unit secretary to find a person manually.



7. **Reach a group of subject matter experts easily.** Use the Call by Group functionality so users can reach experts easily. For example, a non-critical care physician redeployed to treat COVID-19 patients can use her Vocera Smartbadge, Badge, or smartphone app to reach the right specialists when she needs assistance or information.



8. **Make it easy for care teams to reach people in the community *outside* the hospital.** Add outside numbers to your Global Address Book on the Vocera Voice server. This will allow care team members to directly call the local department of health, surrounding hospital command center, infectious disease office, local clinics, another hospital or health system, and more – without needing to search for phone numbers or connect to a telephone.



9. **Allow Vocera users outside the hospital to reach users *inside* or *outside* the hospital.** Hospital staff can log into your hospital communication system with their Vocera smartphone app while at home or outside of the hospital. You can also configure your solution so users outside the hospital who are licensed for Direct Access can call a direct access number, use their name and password to authenticate, and use the Vocera Genie to call another Vocera user or a number in the Global Address Book on the Vocera Voice Server. This eliminates the need to ask an operator or unit secretary to find a person manually.



Manage, Share, and Access Urgent Information

1. **Stay informed on key events with automated alerts.** When communication is not integrated with the electronic health record and other systems, environmental barriers such as isolation rooms, layers of PPE, and noise from powered air-purifying respirators (PAPRs) can cause critical alerts and alarms to be missed. Integrate the electronic health record and other systems with the Vocera Platform through the Vocera Engage intelligent workflow engine. Receive notifications about new orders, patient transports, critical lab results, high-risk admissions, sepsis risk, pain assessment reminders, patient consult requests, and more. Alerts include patient, event, and care team context.

2. **Allow care team members to be notified immediately** with a patient's COVID-19 test result or when risk factors are present. Care team members can receive immediate notifications from your lab system or clinical surveillance system on positive or negative results. Configure your solution to allow critical lab values and patient vitals indicating COVID-19 to be sent from the electronic health record to clinicians.



3. **Send pulse oximeter alerts to the right recipient.** To raise awareness of COVID-19 indications, configure your Vocera system to send pulse oximeter alerts with certain parameters or thresholds directly to the attending nurse or respiratory therapist's Vocera Smartbadge, Badge, or smartphone app.



4. **Flag a positive COVID-19 patient or test result.** Add an alert heading to an urgent lab result, call, or STAT order. For example, configure your solution to indicate that a patient who is the subject of a call or notification is COVID-19 positive. An urgent header will appear on the recipient's Vocera Smartbadge, Badge, or smartphone app indicating the notification is critical.

5. **Push COVID-19 policy updates to the right team members.** Make it easy for care teams to receive regular updates on changes to policies related to COVID-19, such as employee vaccination schedules, visitor policies, or PPE requirements. Push out messages to Vocera smartphone app users containing links to internal or external websites containing current hospital protocols.



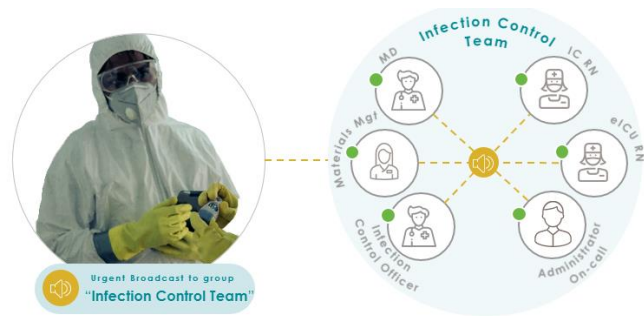
6. **Simplify ventilator alarm descriptions.** Hospitals using Vocera Engage can configure their system to simplify terminology and include actions based on the ventilator alarm type. Engage provides flexibility to allow you to modify the Heading description of a ventilator alarm notification to adapt for use by clinical staff without familiarity or years of experience in critical care or intensive care units. Engage also allows you to include URL links in alarm notifications so staff can view clinical reference material or CDC educational content.

Streamline COVID-19 Vaccine Administration and Management

1. **Protect your vaccine supply.** If a refrigerator storing vaccines deviates from the proper temperature, your pharmaceutical refrigerator temperature-monitoring system can send an alert directly to the attending pharmacist's Vocera Smartbadge, Badge, or smartphone app. This workflow can be configured through the Vocera Engage intelligent workflow engine, third-party middleware, or direct Vocera Messaging Interface (VMI).
2. **Communicate with offsite COVID-19 immunization and testing stations.** Keep your pharmacy, mobile swab, and/or mobile vaccination teams in satellite locations connected with the main campus. If wireless access points are in place, staff at these locations can communicate using their Vocera Smartbadge, Badge, or smartphone app. If a satellite location lacks Wi-Fi, staff can log in to the hospital's Vocera communication system with the Vocera smartphone app.

3. **Communicate instantly with COVID-19 vaccination teams.** Enable users to quickly and easily call or send a message to all members of a group involved with vaccine distribution. A variety of response groups can be configured from the Vocera Platform Web Console. Examples include:

- Vaccinators or pharmacists
- Staff distributing vaccines to vaccination areas
- Staff responding to adverse vaccine reactions
- Staff responding in the event of a freezer failure

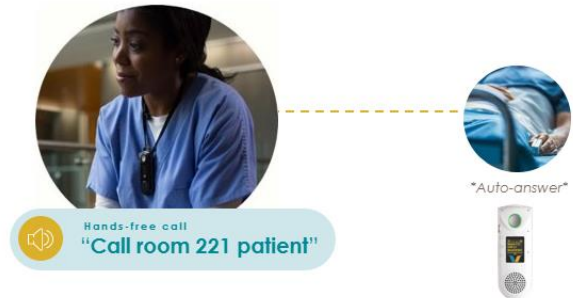


4. **Set task reminders.** Staff can create reminders for themselves, another user, or a group of users using the Record a Reminder function. For example, employees who are scheduled to receive their first or second vaccination can set up a reminder for a specific date in the future to ensure they don't miss their appointment.

Facilitate Patient and Family Communication

1. **Keep loved ones who cannot be in the hospital updated on their family member's surgery status.** Create a richer, more human connection for patients and their loved ones before, during, and after care with the Vocera Ease patient-family engagement solution. Keep loved ones informed and help reduce anxiety with secure, HIPAA-compliant messages using unlimited multi-lingual templates, photos, videos, and two-way video conferencing.
2. **Enable nurses and patients to communicate in temporary pop-up bed locations lacking nurse call.** Many rooms and beds in pop-up bed locations don't have nurse call. For isolation pop-up locations, a nurse must don full PPE to communicate with the patient. Patients don't have a way to communicate with their nurse. Families are unable to connect with their loved one.
3. **Allow patients and family members to connect with a specific care team member.** Configure your solution so a landline phone in any hospital room can be used to reach a care team member. For example, a patient or family member can dial 111 to reach their assigned nurse or dial 222 reach the respiratory therapist.

4. **Help restore the human connection between care teams and patients** with a new feature for use with the Vocera Smartbadge or Badge. Secure a Smartbadge or Badge to each patient bed at the height of the patient's upper torso. Log into the device with a generic profile such as "Room 5 Bed 1." Set the generic profile to auto-answer with no other actions permissible.
 - **Nurse-to-patient communication.** When a nurse needs to speak with the patient, the nurse simply presses the Call button on his or her Vocera Badge and says, "Call Room 5 Bed 1" from anywhere outside the room. Staff can also call from a landline, or from a Vocera smartphone app or web client. The Smartbadge or Badge attached to the patient's bed auto-answers (the patient does not have to touch the device), and the nurse and patient can communicate quickly and safely.
 - **Patient-to-nurse communication.** When the patient needs to contact the nurse, simply press the call button on the Badge to reach the assigned nurse.
5. **Make it easy for patients to discretely receive their COVID-19 lab results.** Set up a centralized phone number for patients to call to receive their COVID-19 lab results using the Vocera Genie Access Number. The patient's call can be automatically routed to the remote test results notification team, so the patient can receive their results quickly and discretely.
6. **Connect patients with their families through a pillow speaker.** A nurse can use the command "dial an outside number" on the Vocera Smartbadge or Badge to call the patient's family member. The nurse puts the call on hold and transfers it to the patient's pillow speaker so the patient and family member can have a conversation.
7. **Round on patients, virtually.** Staff conducting patient rounds virtually – calling an inpatient in their hospital room or calling an outpatient at home – can document the sentiment of the call using the Rounds app, part of Vocera Ease patient and family engagement solutions. For example, patient experience team members can ask the patient about the quality of care they are receiving over the phone and document the patient responses in the Rounds app on their tablet. They can also ask if there is anything that can be done to make the patient's stay more comfortable, such as facilitate remote contact with a family member.



Promote Care Team Well-Being

1. **Remind staff to pause and practice mindfulness to reduce stress, sharpen concentration skills, and contribute toward overall mental and physical health.** Use the mindfulness feature built into the Vocera Smartbadge, Badge, and smartphone app to help reduce stress, even during busy workdays. Say the command "Play Mindfulness" to receive a guided meditation of 30 seconds, one minute, or five minutes.

Customer Stories from the Front Line

Improve Capacity and Throughput with Safe Patient Flow

Bairnsdale Regional Health Service – Bairnsdale, AUS

Staff working under the tight infection prevention protocols can communicate with other parts of the hospital without having to don and doff PPE, or cross between COVID-19 protected areas, using the Vocera Badge.

“It’s been a real game-changer. It saves us a lot of legwork and allows us to get help quickly when we need it. In a place like Maddocks Gardens, which is a large building with a number of different areas, that’s been really important,” said Carolyn Morgan, Aged Care Educator at Bairnsdale Regional Health Service.

Baptist Health Hardin (FKA: Hardin Memorial Health) – Louisville, KY

As healthcare professionals continue to find ways to get PPE to the front line, the Vocera Badge is helping clinicians at Baptist Health Hardin conserve PPE.

“Right now, in the midst of a little bit of extra tension and stress, with processes changing practically daily, isolation materials in place, and personal protective equipment on, we are still able to communicate in real time,” said Deanna Parker, Assistant Vice President of Emergency Services at Baptist Health Hardin.

Royal National Orthopaedic Hospital – Greater London, UK

In 2019, Royal National Orthopaedic Hospital (RNOH) decommissioned pagers in its new, state-of-the-art Stanmore Building and replaced them with a Vocera clinical communication solution. The hospital’s Vocera deployment includes the Vocera Badge, Vocera smartphone app, and nurse call integration.

The hospital uses its Vocera system is to mobilize its Crash team, which is focused on treating cardiac arrest. After deploying Vocera technology, Crash team mobilization time improved 84%, dropping from an average of two minutes and five seconds to 20 seconds.

With COVID-19, Vocera hands-free communication has helped the hospital save time and PPE. Runners wearing Vocera Badges bring supplies to clinicians treating COVID-19 patients.

“The ability to wear Vocera technology under even the most restrictive PPE to facilitate communication has been amazing,” Matt Phillips, Lead Clinical Practitioner, Acute Intervention Team at Royal National Orthopaedic Hospital.

Saratoga Hospital – Saratoga Springs, NY

Before Saratoga Hospital experienced its first wave of COVID-19 patients, care team members were well prepared. The hospital conducted PPE training to help frontline workers understand the right way to put on PPE and the safest way to remove it.

“Managing a pandemic is not the time for cell phones or other hand-held devices that can be contaminated. Because Vocera Badges can be worn and used under gowns, our care team members were able to communicate quickly and safely. We were able to save valuable time and PPE,” said Diane Bartos, DNP, RN, NEA-BC, Director of Critical Care at Saratoga Hospital.

[Cone Health](#) – Greensboro, NC

Within 28 days, Cone Health transformed its Green Valley campus into the area's first specialized COVID-19 hospital, boasting the latest development in coronavirus care, negative pressure ventilation, and hands-free communication throughout the facility. Care teams in the new Women's & Children's Center at Moses Cone Hospital use the Vocera Smartbadge and Vocera Vina smartphone app to provide exceptional and personal care.

[Tufts Medical Center](#) – Boston, MA

Tufts Medical Center, a long-time Vocera customer, has employed Vocera technology in its response to COVID-19.

“As other organizations prepare for a potential patient surge, I recommend giving all clinicians a common tool, like the Vocera Badge. It will help staff communicate safely and efficiently. Now is the time for nurses to innovate and embrace technology as we face new healthcare challenges,” said Linda Potts, RN, Associate Chief Nursing Officer at Tufts Medical Center.

Hospital in Abu Dhabi, UAE

When this multi-specialty hospital began responding to the pandemic in March 2020, it became a dedicated COVID-19 support hospital. Clinical roles throughout the organization shifted and the Vocera system administrator had to create new roles and communication groups to reflect the changes for hundreds of staff members within hours.

Multiple external screening tents were set up with wireless access points to ensure redeployed staff could communicate outside hospitals walls.

Hospital in Manchester, ENG

At this hospital, team members in one room to connect the Vocera Badge to a Bluetooth speakerphone to communicate with a team member working in isolation, similar to having a conference call.

Hospital in New York, NY

This orthopedic hospital learned on a Tuesday afternoon in March that they would need to take overflow patients from another hospital on Thursday morning. Ten isolation rooms with safe, two-way communication between patients and care team members would need to be operational.

The Smartbadges were shipped to the customer overnight. Wednesday, our upgrade team worked with the customer to remotely upgrade servers, make changes to the hospital's network, and configure and test the new Smartbadges. That evening, the customer placed the Smartbadges in the patient rooms. Thursday morning at 8:00, the 10 isolation rooms were ready.

Hospital staff could communicate safely with patients and with each other while wearing PPE. Using hot word detection on the Smartbadges, care teams can say, “OK Vocera” to start communicating.

[Find People Easily in Quickly Changing Environments](#)

[Intermountain Healthcare](#) – Salt Lake City, UT

Care teams at Intermountain Healthcare's hospitals use Vocera technology to communicate with remote pharmacists, who work at satellite locations. A nurse wearing a Vocera Smartbadge and Badge just uses the command, “Call remote clinical pharmacist” to connect with the responsible clinical pharmacist.

Hospital in Los Angeles, CA

During the COVID-19 pandemic, staff at this facility communicate safely and efficiently by wearing the Vocera Badge under PPE, and by using specialized communication groups that have been set up. Communication groups include:

- A COVID-19 runner group used by security guards who screen patients at hospital doors. If a patient shows symptoms of COVID-19, the security guard calls a runner who escorts the patient to the triage tent for evaluation.
- A COVID-19 runner group used when sick patients need to be escorted from tents to the ED, and from the ED to the quarantine unit.
- A quarantine unit group that lets staff working in the triage tents communicate efficiently with the quarantine unit inside the hospital.

Streamline COVID-19 Vaccine Administration and Management

Hospital in Hampton, VA

This hospital integrated its refrigerator temperature-monitoring system with the Vocera Engage intelligent workflow engine to allow an alert to be sent directly to the pharmacist's Vocera Smartbadge, Badge, or smartphone app if a pharmaceutical refrigerator deviates from the proper temperature.

Facilitate Patient and Family Communication

Health First – Central FL

To improve patient and family communication, Health First deployed the Vocera Ease patient and family communication solution in its four Central Florida hospitals. The Ease app connects families and loved ones, no matter where they are, and helps support physical distancing measures required by COVID-19 protocols.

“Even during the best of times, a hospital stay can cause anxiety for patients and their families. Not only are they dealing with a medical procedure, but they often can’t be together in the hospital. Seeing a reassuring picture of grandma or a newborn family member provides needed comfort,” said Mark Rosenbloom, M.D., FACS, CPE, Vice President of Clinical Transformation at Health First.

Lakewood Ranch Medical Center – Lakewood Ranch, FL

Lakewood Ranch Medical Center deployed the Vocera Ease patient and family communication solution to provide better connectivity and transparency to families and friends of its patients. With the changes the medical center made in response to the COVID-19 pandemic, loved ones cannot be inside the building while a patient is having surgery.

“The solution proposed a fast and easy way for care team members to send updates to our patients’ loved ones via secure text messages to help minimize stress or worry friends and families may be feeling,” explained Kimberly Meadows, RN, clinical leader, surgical services, at Lakewood Ranch Medical Center.

[Orlando Health Winnie Palmer Hospital for Women & Babies](#) – Orlando, FL

Infants Vivienne and Margot Freeland were born four and a half months prematurely at the start of a pandemic at Orlando Health's Winnie Palmer Hospital. The Vocera Ease patient and family communication solution kept the twins' family connected even when visitor restrictions prevented the family from entering the hospital.

"Some of the first photos I have of Vivienne are from the Ease app. The girls had 12 surgeries total and when they went into surgery, the surgery team would keep us updated via Ease through the whole surgery," said Laura Freeland, mother of Vivienne and Margot Freeland.

[University of Chicago Medicine](#) – Chicago, IL

The Experience and Innovation team at the University of Chicago Medicine built a rounding program prior to COVID-19 in which leaders would check in on patients, solve immediate comfort needs, and gather feedback on care in the Rounds app, part of Vocera Ease patient and family engagement solutions.

At the onset of COVID-19, infection control protocols precluded in-person rounds. The team pivoted to virtual, phone-based rounding and is creating connection and caring relationships that support recovery from the stress of a COVID-era hospitalization.

Promote Care Team Well-Being

Hospital in Bronx, NY

When a COVID-19 patient is discharged from this hospital, a nurse from the COVID-19 unit informs the Vocera system administrator. The system administrator then broadcasts the message, "A COVID patient has been discharged from the ICU!" while a celebratory song plays. Team members receive the message on their Vocera Badges.