

# RANKEN JORDAN

## Facility-wide VoIP dictates medical-grade wireless

### As a leading pediatric specialty hospital, why is Vocera VoIP communication so pivotal to your unique model of patient care?

Primarily for two reasons. One, the Ranken Jordan children are some of the most medically complex. Instead of having a single medical condition, they often have multiple medical challenges. Yet, we strive to keep them moving and mobile, only spending time in their rooms to rest. And even though our facility is small, we have several busy outpatient programs, intensive day treatments and a comprehensive orthopedic and rehabilitation clinic. Secondly, since everyone is in motion, traditional communication devices won't help. Desk phones only work if you are stationary. And overhead paging is very disruptive. So that led Ranken Jordan to look for a highly mobile, efficient form of communication. The Vocera wireless pendant fit our use case.

### You reference a medical-grade wireless solution. Can you elaborate?

It's all about ubiquitous wireless coverage and signal strength in every corner of the hospital. In this case, it included every square foot—elevators, restrooms, closets, mechanical rooms, stairways, everything—because patients and staff are everywhere in the building. It also was important to make sure there were no dropped connections on the Vocera solution because it would be an integral part of the hospital's emergency response system. It had to work perfectly everytime. In fact, one test we used after everything was installed was to start a Vocera session and move through all three floors of the hospital, the elevator, the stairs and outside the building. The connection never dropped.

### You mentioned some unique challenges. What were they, and how did Black Box help you address them?

Ranken Jordan needed a solution that would retrofit well into an existing building, plus we wanted a solution that would scale for a smaller hospital relative to cost and maintenance. The solution had to meet the challenge of our unique architecture—high ceilings, curves, metal walls, lots of glass—characteristics of an unfriendly RF environment. With Black Box, the installation was painless and virtually invisible. No antennas or access points are visible in the facility. The Wi-Fi access points are securely located in closets and ceiling cabinets. As well, the ensure all necessary precautions were taken during installation. Black Box exceeded the Wi-Fi wireless coverage and signal strength required by the Vocera solution; and both performed better than we expected, inside and outside of the hospital. In addition, this is a very low maintenance system. It truly is install it and forget it. Ranken Jordan's small IT staff has spent almost no time trouble shooting and remediating wireless coverage issues.

### Ranken Jordan's solution at a glance:

- 60,000 sq. ft. of coverage under roof, plus campus exterior
- Black Box Network Services WLAN solution with 51 Cisco access points (42 inside, 8 outside and one for the elevators)
- Wireless clients include approximately 125 Vocera badges, 24 laptops and 10 PDAs

### An Eye on the Future

Future growth plans for wireless:

- Wireless Medical Telemetry
  - Patient & guest Internet access
  - Cerner EHR
  - Facility expansions
- 24 laptops and 10 PDAs

### Key Takeaway:

Utilizing Black Box to deliver Wi-Fi for Vocera enabled Ranken Jordan to replace pagers, 2-way radios and walkie-talkies with a single, highly-reliable hands-free wireless voice communication solution. Vocera provided improved patient safety and quality of care. In addition, nursing estimated that each nurse eliminated 45 minutes per shift locating staff throughout the building.

