



Mitigating Outages of Digital Phones

Rebecca Qualey, RN, MA

INTRODUCTION: Nurse Informaticians (NI) have many different responsibilities and are involved with myriad technologies that transcend the traditional electronic health record and documentation/order entry systems. Some systems, such as specimen scanning, often have an NI involved, but there are other systems that are not always recognized as needing NI expertise. The transition to digital phones in our hospital introduced another system that could have a planned or unplanned outage. As we discovered, this system, too, could benefit from input by NIs. An unplanned outage of the digital phone system had a major impact on communication despite widely used voice over IP (VOIP) devices, pagers, and personal cell phones that function over a wireless network separate from the digital phone system. The outage revealed that while the VOIP phones could still call each other, calls from outside land lines or cell phones to the VOIP are routed through the digital phone system and thus do not go through when there is an outage. It was therefore determined that all units required a non-digital phone line (analog) that would work when the digital system was down. **METHODS:** Working together, the NI and Telecommunications department performed an analysis of existing phone lines on each Nursing unit in our department, including the operating rooms and Prep/PACU areas. Many units had only one analog phone line, which was allocated to the fax machine, and some units had no analog line. The NI determined where new lines should be placed and submitted service requests to have analog lines installed in each of the units. In an effort to make it easy for staff to locate their 'downtime jack' color coded flaps were installed over each port and the jack was marked with red tape. Red telephones were ordered and installed on each unit to differentiate the 'downtime phones' from the regular digital phones. A master list of jack numbers, locations, and telephone numbers for all units in the department was created and included as part of the policy for downtime management of telephone systems. **RESULTS:** The first phase of telephone downtime planning is complete in our department: all nursing units are now fully prepared should another telephone outage occur. Each unit is equipped with phones that are easily recognizable to staff and a policy is in place to guide them during an outage. **CONCLUSION:** Our departmental telephone downtime process has been in place since the beginning of the year. We are now ready to move forward with the next phase of the project: to extend the process to ancillary departments such as Pharmacy, Lab, Blood Bank, Security, and others. Nurse informatician's' combination of clinical and technical knowledge makes them the key persons to facilitate communication between departments and lead multidisciplinary teams through the planning, implementation and documentation of a hospital-wide downtime process for digital telephone systems.