

Managing Ascom User Equipment in Healthcare

Purpose

Ascom understands the daily challenges associated with managing the mobile users and equipment associated with mission critical communications. Understanding how to achieve optimal utilization, sustained performance and successful practices associated with Ascom equipment is something that does not have to be learned through painful experience. Ascom took the time to put together some guidelines and best practices observed at top healthcare institutions throughout North America who chose Ascom to supply them with equipment and applications to facilitate mobility and improve patient safety and satisfaction.

Competence

You have a great tool, don't be afraid to use it. Ascom offers multiple forms of education including instructor led training, self paced E-Learning, comprehensive user guides, quick reference guides and many years of experience.

Quickly Establish a Network of Competence

- New users should be directed to a resident expert for training or to one of several programs offered by Ascom.
- Designate a "Go - To" person.
- Include the system administrator and help desk representatives in user events and competence initiatives.
- Troubleshooting - end users who have difficulty with their handsets or system issues should first:
 - Contact a peer, supervisor or "Go - To" person for assistance.
 - Use an established chain-of-command to notify the help desk of your problem.

Ascom Academy

The Ascom Academy is located in Raleigh, North Carolina and serves as the training center for much of the certification training provided by Ascom in North America. The Ascom Academy also hosts programs such as self-paced E-learning, customized group training and clinical user training.

Training material and programs that typically benefit healthcare providers include:

Education of Users:

- User Guides - Manuals to serve as an overview and get you started.
- Quick reference guides - A single card for handy reference.
- Clinical user training - Instructor led training conducted at the customer site.
- User Tutor - Web-based user training to expand written guides, supplement instructor training and support ongoing competence requirements.

Education for System Administrators:

- FreeNET Fundamentals - Web-based technical training.
- FreeNET Basic - Instructor based technical training.
- FreeNET Advanced - Instructor based technical training.
- IP-DECT Basic - Instructor based technical training.
- IP-DECT Advanced - Instructor based technical training.
- UNITE Basic - Instructor based technical training.
- UNITE Advanced - Instructor based technical training.

Frequently Asked Questions

- What basic equipment should be distributed to my users?
- How do I get up to speed on basic handset use?
- What training do I need for my users?
- How do I keep users trained after the instructor leaves?
- What training do I need for my system administrators and help desk?
- Do you have suggestions for battery charging and maintenance?
- What practices are others adopting in regards to private communications and confidentiality: Health Insurance Portability & Accountability Act (HIPAA) and Protected Health Information (PHI)?
- How do I keep the handsets clean?
- How do I get handsets repaired?
- How often should I replace batteries? How long do they last?
- How are others scheduling down-time maintenance and what are the typical procedures?
- Can you provide some general guidelines that we can adopt to define process and procedure?

Basic Equipment

Handset

- The handset is purpose built for healthcare (lightweight, robust and capable) to preserve accessibility while allowing mobility throughout a designated coverage area.

Batteries

- Battery options may include standard and extended batteries.
- Depending on the type of handsets and network settings, a standard battery can supply up to 20 hours of talk time and 240 hours of standby time. The battery life of WiFi handsets, such as the i75, is much more limited. A standard battery for the i75 will supply from 2 to 10 hours of consecutive talk time. The average standby time is approximately 40 hours.
- The battery consumption rates of WiFi handsets, such as the i75, can be greatly extended beyond these figures with network settings and enhancements such as U-APSD.
- The extended life battery for the i75 will increase the supply time of a standard battery by about 80%.
- The time of a complete charge cycle will range from 2 to 4 hours for most Ascom batteries.
- The life expectancy of a battery is based on limitations related to shelf life and charge cycles. Ascom batteries typically have a life expectancy of 400 to 500 charge cycles.
- A removal key is required to remove the 9d24 battery pack. These unlocking keys should be located adjacent to the charging locations. Using anything other than the intended key to unlock the 9d24 battery could damage the battery and/or handset.

Charging Options

d62

- A single position desk top charger. Battery must be attached to handset.
- Two types of wall mounted rack chargers.
 - One type of charger will charge 6 batteries by themselves.

- The other style of charger will also charge 6 batteries but only when they are installed in handsets.
- The wall mounted rack chargers are modular and up to four units may be interconnected.
- Wall mounted rack charger that will charge 6 batteries. Battery may be charged separately or with the handset.
- A battery is fully charged after about 4 hours and when:
 - The LED on the handset changes from orange to green.
 - The battery icon on the handset displays a full charge.
 - The LED on the rack charger spot turns green.

9d24

- A single position desk top charger. Battery must be attached to handset.
- Wall mounted rack charger that will charge 4 batteries. The battery may be charged separately or with the handset. Inserts are required to charge just a battery.
- Rack chargers are modular and may be interconnected.
- A battery is fully charged after about 4 hours and when:
 - The battery icon on the handset displays a full charge.
 - The LED on the rack charger changes from flashing green to steady.
- A removal key is required to remove the 9d24 battery pack. These unlocking keys should be located adjacent to the charging locations. Using anything other than the intended key to unlock the 9d24 battery could damage the battery and/or handset.

i75

- A single position desk top charger. Battery must be attached to handset.
- A single battery pack charger.
- Wall mounted rack charger that will charge 24 batteries or 12 handsets or any applicable combination.
- Extended life batteries may only be charged with the rack charger.
- A battery is fully charged after about 4 hours and when:
 - The battery icon on the handset displays a full charge.
 - The LED on the rack charger is steady green.

Handset Accessories Available from Ascom

- Extended life batteries
- Lanyards
- Security string
- Quick reference guides
- Headset, boom microphone
- Headset, cable microphone
- Headset, industrial
- Leather case
- Hinge-type belt clip (standard)
- Swivel-type belt clip
- Battery removal key for 9d24

Guidelines for Managing Use

- Staff members assigned to a wireless handset should be required to carry it at all times while on duty.
- The handset should remain powered on at all times with an audible alert unless noted restrictions prevail.
- The handset should be handled with care. Mishaps and damaged equipment can be greatly minimized with individual accountability or requirements to carry handsets affixed to clothing/pockets to prevent a drop or immersion.
- Individuals should be made responsible for refreshing batteries as need to maintain an adequate charge.
- Low battery conditions can result in diminished performance of the handset and should be changed immediately.
- Shift changes are an excellent time to refresh batteries.
- Establishing sign in/out procedures for handsets is a common practice.
- Handsets may be distributed to each staff member or may be passed from one staff member to another (shared phone) but sign in/out procedures should be exercised in each case.
- If the shared handset concept is being used, the user must log off the system before the next user can login.
- Any handset accidentally removed from the premises should be returned without delay.
- Handset distribution and charging stations should be established at central locations such as a nurse station.
- In some configurations, a user must first log out before charging a handset.

HIPAA & PHI Considerations

- A general practice is that all discussions related to patient information be kept brief when using a wireless handset given the dynamics of the surroundings.
- Handset users must be cognizant of their movement and surroundings when discussing confidential patient information.
- Ascom handsets often have a speakerphone mode which should be treated with particular caution.
- Handset users should consider their options for discussions that are to confidential:
 - Walk to a private area to take or make a call.
 - Place the call “on hold” and walk to a private area to take a call.
 - Return the call at another time.
 - Wear a headset.
 - Transfer the call to a co-worker or manager in a better position to carry on a conversation at that time (depending on the need involved).
 - Use the “mute” feature:
 - The Mute Mode can be used to maintain a quiet environment while providing care at the patient bedside and may be used in conjunction with voice mail systems and options.
 - The Mute Mode is activated by depressing the round button on the right side of the handset casing.
 - The handset will display a music note with a line through it at the top of the handset screen as a visual reminder that the handset is in the Mute Mode.
 - Voice mail (with caution):
 - Allow voice mail or an automated response to intercept incoming calls that cannot be taken at that time.
 - However, patient orders and details should never be left in voice mail box.

Care and Cleaning

- As a minimum, handsets should be cleaned and disinfected daily.
- Handsets and batteries should also be cleaned and disinfected after:
 - Exposure to any potential contaminants
 - At each shift change
 - Prior to docking in charge stations
 - Prior to exchanges with another handset user
 - After any exposure in isolation areas
- Visible soil or known contaminants should be should be removed as quickly as possible.
- Acetone and like solutions should not be used for cleaning.

- Never immerse the handset in liquid.
- Allow the device to dry completely before use or charging.
- The following products are recommended by Ascom for handset cleaning and disinfecting:
 - Ecolab Asepti-Wipe II (Product # 61027330)
 - PDI Sani-Cloth HB (Product # Q08472)
 - PDI Sani-Cloth Plus (Product # Q89072)
- Avoid the use of high residue labels, permanent markers and permanent etching. Otherwise this will create difficulties during cleaning and may void the service warranty.
 - Note: If individual identification is needed and the handset display or factory label does not suffice, Ascom recommends the following labels:
 - TZ Tape, used with a Brother P-Touch (or similar model)
 - American Label, Poly (Product # XXX)

Handset and Battery Attrition

- Non-functional handsets should be taken to a designated, in-hospital “Go-To Person”/System Administrator for return/repair.
- Replacement handsets/batteries should be available at all times.
- Hospital staff should contact an internal “Go-To Person” for all repair/replacement needs.
- A central log should be used to track all equipment attrition by area and user.
- Handsets in need of repair or replacement.
 - Include a form that captures the description of the problem.
 - Include a central replacement pool.
 - Include a logistical process (Form completed, problem recorded for internal failure track/trend, Return Material Authorization obtained from supplier, equipment shipped to supplier, replacement equipment received, equipment put back in swap pool).
- Budget to replace batteries as they approach 500 charge cycles.

System Maintenance (Scheduled and Unscheduled)

- Optimize system performance with minimal impact plans.
- Consult with your provider concerning scheduled maintenance events and minimal impact project plans.
- Administrators should be trained and certified by the Ascom Academy.
- Problems are reduced or resolved more quickly with:
 - Established service level agreements with the equipment supplier.
 - Proactive maintenance including the implementation of available updates, daily administration procedures and frequent data backups.
 - Internal knowledge.

- An established process for collecting detailed testimony or problem descriptions from users with each instance.
- Users should have the ability to contact an established Help Desk or IT Administrator as soon as there is a problem.
- An established process to establish the urgency and impact based on the type of problem.
- Unplanned outages can occur due to network or system problems.

Best Practice Considerations for Handset Maintenance Policy

- Establish a responsible staff member of the hospital or unit that can administrate ASCOM Device Management Process and be the hospital's "Go-To Person" and communicate hospital-wide who will have this role with complete contact information.
- Establish policies prior to deployment.
- Establish staff accountability with competence requirements and equipment condition.
- Identify staging and battery charging locations and post procedures.
- Establish response time responsibilities for supporting departments including Telecommunication, IT, and Biomedical Engineering.
- Create a Sign-in/Sign-out Sheet.
 - An internal hospital mechanism of assigning handsets to individual caregivers for their shift.
 - A hospital document used to record the dispensing and return of handsets within the department.
- Provide positive reinforcement with monthly/quarterly recognition for units that have retained their handsets and lessened the need for handset repair/replacement.
- Place locked and padded "drop" boxes near exit doors as a secondary measure to collect handsets prior to exit.
- Inventory and assign new equipment prior to deployment.
- Establish a procedure for equipment identification and tracking.
 - While powered up and authenticated to the system, handsets should be identified by their extension number.
 - Maintain an equipment cross reference sheet to include, serial number, telephone extension number and user or unit.
 - When possible, program each handset so that names and/or locations are included in the display screen.
 - While powered down, handsets should be identified by their serial number or a small label. The label stock should have low adhesive and leave no residue with removal.
 - and be located strategically (avoid placing identification labels on the display, battery, speaker, mic and belt clip).
 - Never mark the handsets with ink or an engraver as this may violate the factory warranty and repair service arrangement.
- Keep spare replacements on hand to manage repair related attrition. The rule of thumb for swap stock is 2% of your total number of handsets.

- Establish an Out of Service procedure for handsets in need of repair or replacement.
 - Include a form that captures and communicates the description of the problem.
 - Include a central replacement pool.
 - Include a logistical process (forms, failure records, RMA procedure, delivery handling, receipt handling and redistribution).

Best Practice Considerations for Battery Maintenance Policy

- Establish a responsible staff member of the hospital or unit that can administrate ASCOM Device Management Process and be the hospital's "Go-To" person and communicate hospital-wide who will have this role with complete contact information.
- Establish policies prior to deployment.
- Establish staff accountability with competence requirements and equipment condition.
- Identify battery charging locations and post procedures for charging batteries and identifying batteries that are defective or have exceeded their anticipated life cycle.
- Reference Ascom's battery maintenance guidelines for details concerning battery maintenance procedures and charge cycle limitations. Example: Ascom batteries are marked with a date code (example 09w31) to indicate when the battery was last conditioned to support specification. Users should also place a small date label on the battery at the time of initial use established the information necessary to manage the shelf life and charge cycle of your batteries. Record this information for central reference.
- Budget for battery replacements based on your knowledge of daily charge cycles and the date of initial use.