

# HealthCom v2 User Stories

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## 2 HealthCOM Login Notifications

**As a Company, we need notifications in HealthCOM and increased ease-of-use, so that our users are notified as soon as they log-in about any outages, scheduled maintenances, etc. and also increases self troubleshooting for our users with regards to password resets, etc.**

**Initial Log-in screen** - automatically place cursor within text box for user to begin typing Username.

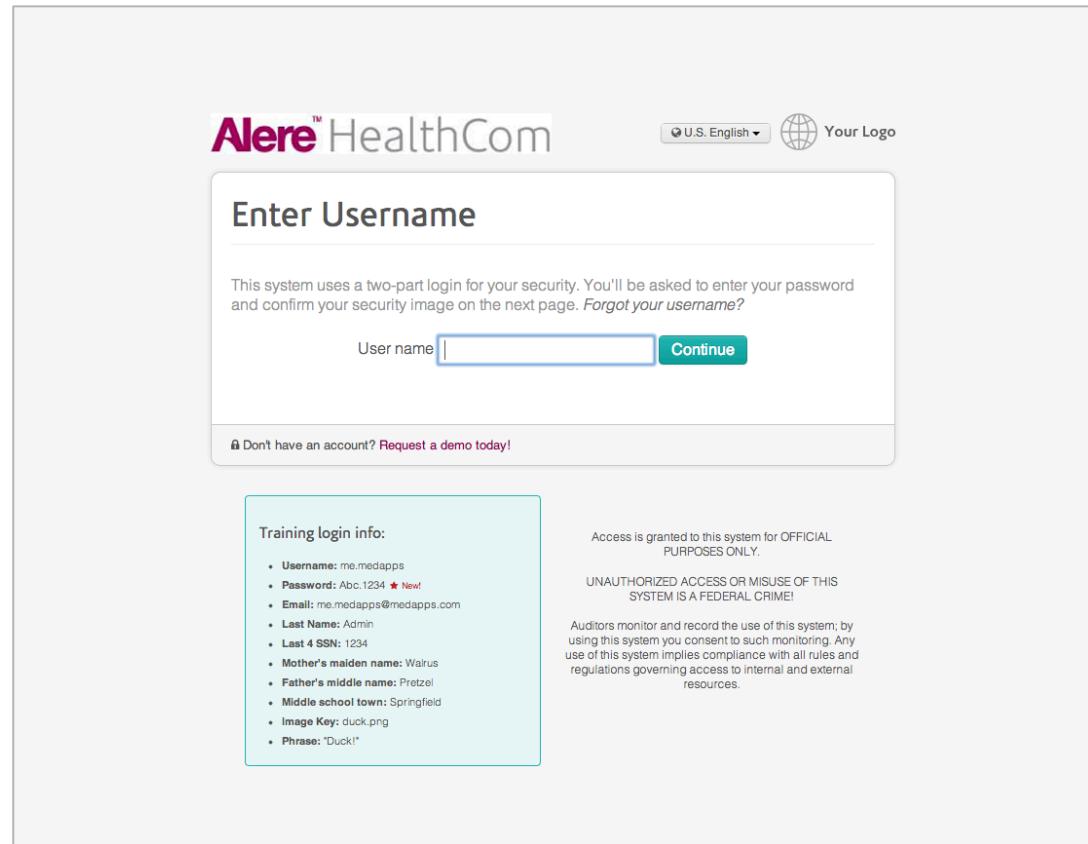
✓ **COMPLETE**

**Initial Log-in screen (when first navigating to URL)** - Add ""Warning"" as seen in Training. Also add what Browsers HealthCOM is currently compatible with?

✓ **COMPLETE** – Will be functional on all browsers, so no message added.

**After User logs in screen** - Add Notification for Users about System Maint., Outages, etc. Once User logs in, they have to read the Service / Maintenance Notification and click "Continue" to continue accessing HealthCOM.

✗ **INCOMPLETE** – Need developer to add “interstitial” page and method for admins to add a message.



<http://hcom-vnextrd.medapps.net/Account/EnterUsername>

## 2 HealthCOM Login Notifications, *continued*

### Password Reset Page ("Forgot Password")

- User must answer 1 (or 2) of their security questions, type in username & email address, and type the "security passcode" (the series of numbers/letters to ensure it's an actual person). Then a new temporary password is sent to them to log-in and create a new password.

**✓ COMPLETE** – Removed security questions and captcha; team determined that e-mail confirmation is sufficient

**Account Locked Out** - User receives a message that their account has been locked out (& possibly the reason? i.e. "too many failed attempts due to incorrect username and/or password") and that the account will be automatically unlocked within 30 minutes for user to reattempt (and do we also want to say "..., otherwise contact MedApps (Alere) Support to immediately unlock" or give User ability to unlock account themselves similar to the Password Reset suggested?)

**X INCOMPLETE** – Not implemented, and e-mails still need to be redesigned. Unable to test without "create user" functions.

The screenshot shows the 'Reset Password' page of the Alere HealthCom website. At the top right, there are language and logo selection buttons ('U.S. English', 'Your Logo'). The main title is 'Reset Password'. Below it, a sub-instruction says: 'If you've forgotten your username or password, fill out the form below. You'll receive an e-mail with your original username and instructions to reset your password.' A link 'Return to login page' is provided. The form contains two input fields: 'Last 4 digits of your SSN' and 'Your e-mail address'. A green button labeled 'Send Reset Instructions' is located below the fields. At the bottom of the form area, a link 'Need help with your account? Contact us at 888.884.2877 or support@alereconnect.com' is shown. The footer contains legal disclaimers: 'Access is granted to this system for OFFICIAL PURPOSES ONLY.', 'UNAUTHORIZED ACCESS OR MISUSE OF THIS SYSTEM IS A FEDERAL CRIME!', and a note about auditors monitoring system use.

<http://hcom-vnextrd.medapps.net/Account/ResetPassword>

### 3 Simple yet flexible patient hierarchy

**As a Entity, I need to have a simple platform to access, manage, and operate so that I'm spending my time helping patients - not on learning how to use a platform. It needs to be easy, simple and logical to use.**

**Architecture Change** - Zero Levels is recommended (or more levels if we have to)

Need to allow at a more flexible structure that allows for flexibility with Structures to be defined in a variety of ways, instead of a rigid hierarchy.

Structures can be defined at the Enterprise level (enforced).

Entity: all Kits and Patients in one "bucket" but then have logic set up within HealthCOM that allows User to choose from a drop-down list of the different views (groups) they want to see (i.e. Diabetes, Dr. Smith's patients, ABC Health Care).

**X INCOMPLETE** – Frontend views need to be connected to Groups logic

The screenshot shows the 'Manage Groups' page in a web application. At the top, there is a navigation bar with links for Dashboard, Alerts (3), Quick Links, Reports, and a search bar. A green button labeled '+ New Group' is visible on the right. The main title 'Manage Groups' is centered above a descriptive text block. This text explains that Groups are "folders" used for organization, noting that users can't see anything on higher levels but can see everything in sub-groups. It includes a link to 'Groups help'. On the left, a sidebar titled 'Groups' shows a hierarchical structure: 'Coyotes' has 'East' and 'West' as children; 'Blues' has 'Wild', 'Rangers', and 'Penguins' as children. The main content area is divided into 'Overview' and 'Contacts' tabs, with 'Overview' selected. The 'Overview' section displays a summary for the 'New York' group under 'Coyotes > East > New York'. It features a circular dashboard with the number '6' and an exclamation mark icon, labeled 'ALERTS'. Below this are statistics: 1,234 active patients, 42 archived patients, 2 patients on the watch list, and 0 patients currently admitted. A link 'View all 37 alerts →' is provided. To the right, there is a 'Edit Group' button, a time zone indicator for Eastern Standard Time (-04:00 GMT), and a 'Users' section showing 211 active users, 4 administrators, 1 locked-out user, and 2 unverified users. A link 'View all users in this group →' is also present. At the bottom, there is an 'Alere Account' section with the identifier ABC000001.

<http://hcom-vnextrd.medapps.net/Groups>

## 4 User Roles

**As a Company, we need more user role levels and intuitive user role names within HealthCOM, so that we can expand our capability & functionality and be able to cater to more Entities.**

**User Roles** - More User Role access levels are needed:

1. Read Only Role - for Physicians and Family Members (Honeywell has this)
2. Reviewer - reviews readings
3. Supervisor - signs off on Reviewer?
4. Administrator (has Inventory Control rights)
5. Billing ? - sees & can pay Invoices to us
6. Shipping ? - can build and manipulate kits but doesn't see patient readings
7. MedApps/Alere - Employees  
Including Professional (User) parameters:  
examples - Dr. Smith sees only ABC Healthcare, Nurse Jane sees only XYZ Healthcare - Diabetes patients, etc.

**X INCOMPLETE** – Frontend views need to be connected to user role logic

The screenshot shows the 'USER FUNCTIONS' section of the HealthCOM interface. At the top, there's a navigation bar with 'Dashboard', 'Alerts 3', 'Quick Links', 'Reports', and a search bar. Below the navigation is a heading 'USER FUNCTIONS' with a sub-instruction: 'Restrict or allow access to patient, inventory, and admin functions. You can also select a pre-defined profile from the drop-down list below.' A dropdown menu shows 'Administrator'. There are three main sections: 'Patients' (ON), 'Inventory' (ON), and 'Administrator' (ON). Each section contains a list of permissions with checkboxes. The 'Administrator' section includes additional sections for 'Users', 'Groups', and 'Super Admin'.

Function	Access Level	Permissions
Patient	ON	This user is able to view patient information.
		<input checked="" type="checkbox"/> Patient Medical Data <input checked="" type="checkbox"/> Show readings & alerts <input checked="" type="checkbox"/> Show medications & diagnoses
Inventory	ON	This user is able to view inventory information.
		<input checked="" type="checkbox"/> Devices <input checked="" type="checkbox"/> User can add new devices to inventory <input checked="" type="checkbox"/> User can archive devices <input checked="" type="checkbox"/> Show base device SIM & carrier <input checked="" type="checkbox"/> Show base device firmware
		<input checked="" type="checkbox"/> Kits <input checked="" type="checkbox"/> User can create new kits <input checked="" type="checkbox"/> User can break up existing kits <input checked="" type="checkbox"/> User can assign kits to patients
Administrator	ON	This user is an administrator.
		<input checked="" type="checkbox"/> Users <input checked="" type="checkbox"/> User can add new users <input checked="" type="checkbox"/> User can edit other users <input checked="" type="checkbox"/> User can archive other users <input checked="" type="checkbox"/> User can assign other users to groups
Groups		<input checked="" type="checkbox"/> User can create & edit groups
		<input checked="" type="checkbox"/> Super Admin <input checked="" type="checkbox"/> User is an Alere™ Super Admin

<http://hcom-vnextd.medapps.net/ManageUsers/Create>

## 5 User Creation

**As a Company, we need more security and logic behind the creation of users, so that our users and our systems are protected and also increases ease of use for our users with regards to password resets, etc.**

An Account Exec at Entity takes the first step to Create a New User by only submitting their Name, Email & Type of Access Level they should be granted.

**X INCOMPLETE** – Frontend views need to be connected to user creation functions

User receives a Welcome email and temporary password to create their account

**X INCOMPLETE** – E-mail needs to be created, e-mail sending & temp. password functions need to be implemented

Email Validation: Once a Prof is created and email sent, User must go to emails and click on provided link to verify their email address, then can continue to log in and create their new password.

**X INCOMPLETE** – First-time login functions and pages need to be implemented

The screenshot shows the 'New User' creation page from the Alere HealthCom system. The header includes the Alere HealthCom logo, language selection (U.S. English), user ID (me.medapps), and a placeholder for 'Your Logo'. The top navigation bar has links for Dashboard, Alerts (with 3 notifications), Quick Links, Reports, and a search bar. Below the navigation is a breadcrumb trail: Home > My Dashboard. On the right side of the header are links for 'Add to Quick Links', 'Print', and 'Excel'. The main content area is titled 'New User' with a subtitle 'Under Development'. A message instructs the user to fill out the form to set up a new user, noting that a confirmation email will be sent. The 'USER DETAILS' section contains fields for Name (First name, Middle, Last name, Jr., III, etc.), Title (Dr., Professor, etc.), (PROVIDER-NAME) ID (internal ID for staff), Date of Birth (MM/DD/YYYY), and Add to Group (using select2.js). The URL for this page is <http://hcom-vnextd.medapps.net/ManageUsers/Create>.

## 5 User Creation, *continued*

User is forced to create a new password when they log in for the first time as well as create and answer a series of Q's in the event they are locked out, forget password, or need to change their password.

**X INCOMPLETE** – First-time login functions and pages need to be implemented

## 6 Richer entity data

**As a Company, we need more Entity (Customer) details recorded, so that we can have all the necessary info in one place.**

When we create Entities, there needs to be much more info stored about them. Such as: Bill To Address, Ship To Address, Account Number with us, Contact info for People at the Entity for us to know who to work with (Users & Non-Users of HCOM), S&H Account number, Logo bigger, Records of their Orders with us, Balance of their Open Purchase Orders, Counter of Active Kits (assigned to Patients) and other counters of inventory.

**X INCOMPLETE** – Frontend views need to be connected to user creation functions

**Note** – “History” items (records, orders, etc) have been pushed back to Phase 2

The screenshot shows a web-based application interface for creating a new group. At the top, there is a navigation bar with links for Dashboard, Alerts (3 notifications), Quick Links, Reports, and a search bar. The main title is "New Group" with a subtitle "Under Development". Below the title, there is a descriptive text about what a group is and a link to "Groups help". The form is divided into two main sections: "GROUP PROFILE" and "MAIN CONTACT". In the "GROUP PROFILE" section, there are four input fields: "Group Name\*" (with a placeholder "A name for this group"), "Alere Account #", "Parent Group" (with a dropdown placeholder "Use select2.js to fill list"), and "Primary Time Zone" (with a dropdown placeholder "Fill from a pre-defined list"). In the "MAIN CONTACT" section, there are three input fields: "Contact's Name", "E-mail Address", and "Phone" (with a sub-field for "Phone number" and a dropdown for "Home"). Below the phone field is a link "+ Add another phone number".

<http://hcom-vnextrd.medapps.net/Groups/Create>

## 7 Patient/Nurse Assignments

**As an Entity, we need new patients that are created/added to the System, to be automatically assigned to all Nurses (or those that we choose), so that the assignment process is quicker and easier.**

By default, all new patients added to an entity's system are assigned to all professionals within that entity.

This also includes patients created through entity's API/webservice system (i.e. VRI's Telehealth, Estenda's CDMP).

**X INCOMPLETE** – Frontend views need to be connected to patient creation functions

Account Execs are authorized to unassign Patients from "Groups of their Users" or "Individual Nurses".

Account Execs (Professional Admin) ability to opt out of Default assignments.

**X INCOMPLETE** – Patient view and profile pages need assignment functionality implemented

**Note** – Assigning a patient to a single staff member is not directly supported; however, an admin could create a Group with one staff member in it if needed.

The screenshot shows the 'New Patient' page under 'Under Development'. At the top, there is a navigation bar with links for Dashboard, Alerts (3), Quick Links, Reports, and a search bar. Below the navigation bar, the page title is 'New Patient' with a subtitle 'Under Development'. A sub-navigation bar shows 'Home > My Dashboard' and links for Add to Quick Links, Print, and Excel. The main content area is titled 'PATIENT DETAILS'. It contains fields for Name\* (First name, Middle, Last name, Jr., III, etc.), Title (Dr., Professor, etc.), {PROVIDER-NAME} ID (internal ID for patients), Date of Birth\* (01/01/1958), and Add to Group\* (using select2.js). A note below the internal ID field states: 'The internal ID your organization uses to identify patients.'

<http://hcom-vnextrd.medapps.net/Groups/Create>

## 7 Patient/Nurse Assignments, *continued*

**Assignments page:** Mass Assign / Unassign function with selecting multiple Professionals (see HealthNET Kit List).

**X INCOMPLETE** – There is no longer an “Assignments” page – instead, patients can be mass-assigned to groups on the View Patients page. The assignment functionality still needs to be implemented.

**Assignments page:** “Search function” - need message or Search functions still available when User clicks on “View Complete List”.

**X INCOMPLETE** – This functionality is replaced by the Global Search feature and the View Patients search, both of which still need to be implemented.

Perhaps ability to check-mark what Professionals (Users) the Patient(s) are assigned to.

**X INCOMPLETE** – The View Patient page and the patient’s profile show the group the patient is assigned to, but the frontend views still need that feature to be implemented.

<input type="checkbox"/>	A	patient123, New	07/14/1955
<input checked="" type="checkbox"/>	A	Iuytrew, Wertyui	10/21/1954
<b>Assign patients to...</b> <input type="button" value="Apply"/>			

<http://hcom-vnextrd.medapps.net/Patients/ViewList>

**Patient**

**James T. Kirk**  
53 years old, male  
**Weight:** 220 lbs  
**Height:** 5' 11"

**29 days** since hospital discharge

**DOB:** 01/01/1960  
**ID:** #1234567  
**Group:** HealthNet West



<http://hcom-vnextrd.medapps.net/Patients/ViewReadings>

## 8 Multiple patient conditions

**As a Nurse, I need to see all the conditions my patient has, so that I can monitor my patient accordingly.**

**Multiple Conditions** - A clear listing of ALL conditions a Patient has and what they are being monitored for needs to be inputted in the Client Editor.

**X INCOMPLETE** – Frontend views need to be connected to patient data

**List of Conditions** should be named "Diagnoses" instead of Conditions.

**✓ COMPLETE**

Include CVA in the list as an option for Saad Healthcare request 1/18/13.

**X INCOMPLETE** – Diagnosis list needs to be created and added to New Patient and Edit Patient pages

### Diagnoses

- Diabetes Type II
- Heart Murmur
- Psoriasis

<http://hcom-vnextrd.medapps.net/Patients/ViewReadings>

## 9 Homehub DMP QAs

**As an Entity, we need HCOM designed to be able to upload the HomeHubs DMP Answers, so that we can showcase a major feature of HomeHubs design.**

Q's will be asked on the Home Hub & the A's need to be uploaded into the HCOM.

**X INCOMPLETE – Q&A functionality needs to be built**

**Reading History**

**+ New Reading**

	Date ▾	Status	Category	Reviewer	Note
<input type="checkbox"/>	10/02/12 11:32 a.m.	Sys/Dis: 2120/80 Pulse (bpm): 78		Christine Chapel	<b>+ Add a note</b> <b>Details</b>
<input type="checkbox"/>	9/24/12 11:32 a.m.	Glucose: 83	Fast	Christine Chapel	<b>+ Add a note</b> <b>Details</b>
<input type="checkbox"/>	9/24/12 11:32 a.m.	Glucose: 140 lbs		Christine Chapel	<b>+ Add a note</b> <b>Details</b>
<input type="checkbox"/>		<b>H Admitted: 9/18/12 Discharged: 9/21/12</b>			<b>Nurse Ratchet - Today, 8:15 a.m. "Patient admitted for phaser injury."</b> <b>+ Add a note</b>
<input type="checkbox"/>	9/23/12 10:11 p.m.	Have you used your rescue inhaler more often today than yesterday? Answer: No			<b>+ Add a note</b> <b>Details</b>

**Assign patients** **Apply**

Showing 10 per page **Prev** **1** **2** **3** **Next**

<http://hcom-vnextd.medapps.net/Patients/ViewReadings>

## 10 Distinguish between OEM and non-OEM devices

**As a Company, we need to identify and track which OEM devices were purchased through MA, and which OEM devices were purchased outside MA, so that we don't RGA a product that our customer didn't purchase through us.**

Need to add field that states the Source of the device. (i.e. if the Customer [Entity] added the OEM to our platform (purchased outside of us), or if the OEM was purchased through MedApps (Alere), etc.)

**X INCOMPLETE** – OEM symbol needs to be added to frontend view, view needs to be integrated with Inventory data

The screenshot shows a web-based inventory management system. At the top, there are navigation links: Dashboard, Alerts (3), Quick Links, Reports, and a search bar. Below the header, the title "Manage Inventory" is displayed with a subtitle "Under development". There are two tabs: "Devices" (selected) and "Kits". On the right, there are buttons for "New Device" and "New Kit". A table lists six devices. The columns are: Serial, Type, Model, Carrier, Patient, Environment, and Kit. Each row contains a checkbox, the device ID (e.g., 2456789), its type (e.g., Base Device, Weight Scale, Pulse Oximeter), model (e.g., HealthPAL MASC-NI105, UA-767 PBT A&D, Freestyle Lite Abbott), carrier (e.g., Orange, Wyless), patient name (e.g., Picard, Jean-Luc, Janeway, Kathryn, Adama, William, Archer, Jonathan), environment (e.g., Production, Training, Quality), and a "View HealthPal Kit" button. The last row has a checked checkbox. At the bottom, there are buttons for "Assign to group...", "Apply", and pagination controls showing pages 1, 2, 3, and Next.

	Serial	Type	Model	Carrier	Patient	Environment	Kit
<input type="checkbox"/>	<b>2456789</b> MAC: 01-23-45-67-89-AB	Base Device	HealthPAL MASC-NI105 Medapps	Orange SIM: 1234567	<b>Picard, Jean-Luc</b> HealthNet West	Production	<button>View HealthPal Kit</button>
<input type="checkbox"/>	<b>2456789</b> MAC: 01-23-45-67-89-AB	Weight Scale	UA-767 PBT A&D	Wyless		Training	<button>Add to Kit</button>
<input type="checkbox"/>	<b>2456789</b> MAC: 01-23-45-67-89-AB	Base Device	HealthPAL MASC-NI105 Medapps	Orange SIM: 1234567	<b>Janeway, Kathryn</b> HealthNet West	Production	<button>View HealthPal Kit</button>
<input checked="" type="checkbox"/>	<b>2456789</b> MAC: 01-23-45-67-89-AB	Pulse Oximeter	Freestyle Lite Abbott	Orange SIM: 1234567	<b>Adama, William</b> HealthNet West	Quality	<button>View HealthPal Kit</button>
<input type="checkbox"/>	<b>2456789</b> MAC: 01-23-45-67-89-AB	Base Device	Mobile Link 2 Medapps	Wyless		Production	<button>Add to Kit</button>
<input type="checkbox"/>	<b>2456789</b> MAC: 01-23-45-67-89-AB	Base Device	HealthPAL MASC-NI105 Medapps	Orange SIM: 1234567	<b>Archer, Jonathan</b> HealthNet West	Production	<button>View HealthPal Kit</button>

<http://hcom-vnextrd.medapps.net/Inventory>

## 11 Add Device

**As a Customer Support member (or Sales or IT), I need better messages and more efficient means to upload DSLs or devices, so that the process is more efficient.**

Need to fix problem were if Device is already in system, then the Save / Add does not occur. Message should be put by device that it was added, or already in System. System should save all other entries and just make you re-do the failed device(s).

More detailed error messages, and ability to know if and where the system left off when uploading if an error did occur during process

**X INCOMPLETE** – Add Device functions need to be implemented, frontend view needs to be tweaked, unable to test error behavior at present

The screenshot shows the Alere HealthCom interface. At the top, there's a navigation bar with links for Dashboard, Alerts (3), Quick Links, Reports, and a search bar. Below the navigation is a breadcrumb trail: Home > My Dashboard. On the right side of the header are buttons for U.S. English, me.medapps, Your Logo, Add to Quick Links, Print, and Excel. The main content area is titled "Manage Inventory" with a sub-note "Under Development". It features two tabs: "Devices" (selected) and "Kits". Below the tabs, there's a form field for "Device:" containing "AnD Medical - Weight Scale - UC-321PBT" with a quantity of "1" and a checked checkbox. At the bottom of the form are "Add Device" and "Submit" buttons.

<http://hcom-vnextd.medapps.net/Inventory#/devices-add>

## 12 Add Multiple Devices

**As a Customer Support member (or Sales or IT), I need better messages and more efficient means to upload DSLs or devices, so that the process is more efficient.**

Need the Ability to Add Individual Devices  
or Upload an Excel Spreadsheet of  
Manufacturer, Device Type and Device  
Model, MacID, Location, Serial No.  
Need to select Entity, Program, Center to  
upload file to.

**X INCOMPLETE** – Bulk Upload Devices  
page needs to be created, and functions  
need to be implemented.

## 13 Bulk Upload Patients

**As an Entity, we need to upload multiple Patients at once, so that we can efficiently create several Patients at once and move on to other tasks.**

A way for customers to upload their patients data into our HealthCOM system in Bulk. Could this be done in Excel? If we could do this, the only step left for our customer to do is to assign them a HPAL kit and set up thresholds. (MA creates a template & provides it on HealthCOM for customers to use)

**X INCOMPLETE** – Bulk Upload Patients page needs to be created, frontend needs to be migrated from staging, and functions need to be implemented.

The screenshot shows the Alero HealthCom interface. At the top, there's a navigation bar with links for Dashboard, Alerts (3 notifications), Quick Links, Reports, and a search bar. Below the navigation is a breadcrumb trail: Home > View Patients > Bulk Upload Patients. To the right of the breadcrumb are links for Add to Quick Links, Print, and Excel. The main title "Bulk Upload Patients" is displayed with a subtitle "Under development". Below the title, instructions say to use the form to upload an Excel-format spreadsheet or download a pre-built template file. It also notes that for fewer patients, one can use the New Patient page. A section titled "UPLOAD SETTINGS" contains a "File\*" input field with a "Choose File" button, a note about saving the file as .xls, .xlsx, or .csv, and a dropdown menu for "Add to Group" with an option "Choose a group...". At the bottom of the form is a green "Add patients" button. The entire page is framed by a light gray border.

*Not yet migrated to development site*

## 14 Build a Kit (or Expand Kit Configurator)

**As a Nurse, I need to quickly & easily build Kits in HealthCOM, so that we can quickly & easily deploy Kits or re-configure if necessary.**

Check-mark the devices you want to be in a Kit.

Then scan in the S/N of the Device into each of the modality fields.

S/Ns would pull out of whatever area they are in, regardless if available or not (AFTER the WARNING).

Warning notices are displayed and have to be authorized before successful.

Ability for Bulk Kit Builder.

**X INCOMPLETE** – Build Kit functionality needs to be implemented, frontend views need to be tweaked afterward

## 15 Setting Thresholds

**As a Nurse, I need one page for thresholds, so that I can efficiently set all necessary thresholds for a patient all in one screen.**

Ability to set thresholds for all modalities in one click.

By default HCOM creates thresholds for the patient(s) automatically, but Nurse can edit them if needed.

Thresholds - Entity based and/or Patient based

**X INCOMPLETE** – Frontend views need to be connected to data and multi-range sliders need to be properly implemented

The screenshot shows the 'Patient Thresholds' section for patient 'James T. Kirk'. At the top, there's a navigation bar with 'Dashboard', 'Alerts 3', 'Quick Links', 'Reports', a search bar, and a magnifying glass icon. Below the header, the patient's name 'James T. Kirk' is displayed with a link to 'Patient Thresholds'. There are buttons for 'Return to Patient Profile' and 'Save Changes'. A descriptive text block says: 'Set the thresholds for this patient by adjusting the sliders for each type of reading. To change the types of notifications you receive for alerts and warnings, visit the Alerts page.' The main area is titled 'Glucose Thresholds' and contains a multi-range slider from 75 to 125. Below the slider, a 'Target Range' input shows '81' to '99'. Two checkboxes are checked: 'Fasting (pre-meal) threshold' and 'Add a warning (yellow) threshold'. Under 'Warning (Low)', the value is '79' with a note: 'Readings between 79 and 81 will trigger a warning. Readings below 79 will trigger an alert.' Under 'Warning (High)', the value is '105' with a note: 'Readings between 99 and 105 will trigger a warning. Readings above 105 will trigger an alert.' At the bottom, there are two checkboxes for 'Notifications': 'Send an e-mail for alerts' and 'Send an e-mail for warnings'.

<http://hcom-vnextd.medapps.net/Thresholds/Edit>

## 16 Combine Threshold Alerts

**As a Nurse, I need threshold dependency and complex alerts, so that I can effectively monitor my patient and receive complex, smart alerts.**

Ability to set dependent thresholds and alerts that are set up in a way that are dependent on multiple threshold types (If Glucose is X and Weight is Y, then send ABC Alert).

**X INCOMPLETE** – Frontend views need to be connected to data, mailing functionality needs to be built, e-mail body needs to be created.

**Note** – More complex alerting behavior has been pushed to Phase 2, but at the very least users in Phase 1 will be able to set different thresholds for “alert” (red) and “warning” (yellow) readings. They will also be able to set different e-mails to be alerted depending on the alert nature.

The screenshot shows a configuration form for a threshold alert. At the top, there is a 'Target Range' input field with '81' in the first box and 'to' in the middle, followed by '99' in the second box. Below this, two checkboxes are checked: 'Fasting (pre-meal) threshold' and 'Add a warning (yellow) threshold'. Under 'Warning (Low)', the value '79' is entered. A note below it states: 'Readings between 79 and 81 will trigger a warning. Readings below 79 will trigger an alert.' Under 'Warning (High)', the value '105' is entered. Another note below it states: 'Readings between 99 and 105 will trigger a warning. Readings above 105 will trigger an alert.' In the 'Notifications' section, the checkbox 'Send an e-mail for alerts' is checked, and an empty input field for email addresses is provided with the placeholder 'Separate multiple addresses with commas'. The checkbox 'Send an e-mail for warnings' is unchecked.

<http://hcom-vnextd.medapps.net/Thresholds/Edit>

## Weight Thresholds

**As a Nurse, I need different weight threshold options, so that I can choose the right option for our Entity or Patient, and effectively monitor my patient's HF/weight.**

With Heart Failure patients/weight readings, nurses are more concerned with weight gain or loss, not the actual weight of the patient. So for the Weight thresholds, can we change how alerts are triggered or give User the option to choose which way to set thresholds? A) Standard threshold or B) Weight gain / loss. So a RED threshold could be +/- 10 lbs, a YELLOW threshold might be +/- 3 lbs, and a GREEN threshold might be +/- 1 lb. (VRIs system alerts nurses if they gain 3lbs. in 24 hours, or 5lbs in 3 days)

**X INCOMPLETE** – Frontend views need to be connected to data

### Body Weight Thresholds

Threshold Type  Range  Gain or loss over time

Threshold  lbs  over  days

Weight gain or loss of up to **5 lbs** over **3 days** will trigger a warning.  
Weight gain or loss of **greater than 5 lbs** over **3 days** will trigger an alert.

Fasting (pre-meal) threshold

**Save all changes**

<http://hcom-vnextd.medapps.net/Thresholds/Edit>

## 18 Blood Pressure Thresholds

**As a Nurse, I need separate Sys and Dys thresholds, so that I can monitor my patient's BP optimally.**

Setup like this: Severe Lower SYS: 70 Lower SYS: 90 Upper SYS: 140 Severe Upper SYS: 200 and then same format for setting up DIA levels

**X INCOMPLETE** – Frontend views need to be updated to incorporate correct range types, then views need to be connected to data, and multi-range slider needs to be implemented.

Blood Pressure Thresholds

Target Range 98 to 106 Readings below 98 or above 106 will trigger an alert.

Fasting (pre-meal) threshold  
 Add a warning (yellow) threshold

Notifications  Send an e-mail for alerts  
 Send an e-mail for warnings

**Save all changes**

<http://hcom-vnextd.medapps.net/Thresholds/Edit>

## 19 Handling Incoming Readings

**As a Nurse, I need to quickly & easily see the most critical patients and readings first, so that I can address those first to avoid any major issues with patient's condition(s).**

HCOM needs to be "Smart"  
Have our system redesigned moreso to Score Alerts /Readings like the Alere system? This is what VRI does as well. Designed so that critical status Patients are brought to the top of the queue for Nurses to see and act on first.

**X INCOMPLETE** – Frontend views need to be joined with alert logic

More in depth than just putting the red readings in the queue first - for instance if a patient had more than one modality send a red reading they are higher in the queue, if they had red readings yesterday and now today - they should get moved to higher in the queue.

**X INCOMPLETE** – Alert logic not yet implemented

The screenshot shows a web-based application interface titled 'View Alerts'. At the top, there are tabs for 'Alerts' (selected) and 'Reviewed'. Below the tabs is a search bar and buttons for 'All Alerts', 'In-Progress (2)', and 'Red (50)'. A list of alerts is displayed, with the first item being 'Kirk, James' with a weight of 260. To the right of the alert list is a 'Task List' sidebar containing several items, some with checkboxes and due dates. A detailed view of 'Kirk, James' is shown, listing 'Glucose: 150 - Above upper threshold of 98' and 'Weight: 210 - Above upper threshold of 200'. It also shows 'Midichlorians: 400 - Within threshold'. A note from 'Nurse Ratchet' is present. On the right side of the alert view, patient information for 'Benjamin Sisko' is shown, including ID, phone number, diagnoses (Space Madness, Moon Lung), and medications (Dihydrogen Monoxide). Below the alert list, 'Next Steps' options include 'Write note', 'Choose alert reason', 'Add a task', and 'Complete review'. A note input field and a 'Save Note' button are also present.

<http://hcom-vnextd.medapps.net/Alerts>

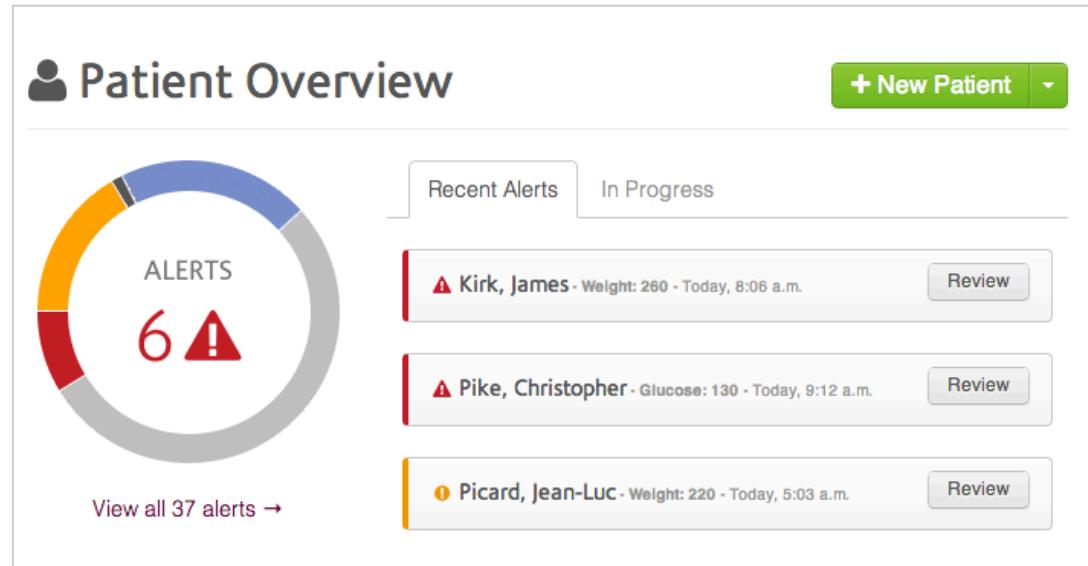
## 19 Handling Incoming Readings, *continued*

Perhaps Phase 1 of this item is ability for User to choose how to view the Home screen; for example Phase 1 could be 2 different buttons User to click on to decide if they want to view Home screen as patients alphabetically (by last name) or as patient status (red first, then yellow, lastly green).

**X INCOMPLETE** – Dashboard widget needs to be connected to alert logic

**Note** – To keep the interface clean and uncluttered, we don't show "green" alerts, as they don't require any action. Instead, these readings are available in the Patient Profile page, as well as the Live Feed report.

We have also decided to make the Dashboard non-customizable in Phase 1 – users will see the widgets associated with their roles.



<http://hcom-vnextd.medapps.net>

## 20 Show readings and sub-readings for all modality

**As a Nurse, I need all readings and any sub-readings shown, so that I can easily view all readings on one screen without any extra button pushes.**

Show both reading and sub-reading for each modality. (no more "+" [expand] symbol)

**X INCOMPLETE – Readings and Alerts pages need to be connected to reading data.**

**Reading History**

**+ New Reading**

**All Readings**   **Alerts (8)**

	Date ▾	Reading	Category	Reviewer	Note
<input type="checkbox"/>	10/02/12 11:32 a.m.	Sys/Dis: 2120/80 Pulse (bpm): 78		Christine Chapel	<a href="#">+ Add a note</a> <a href="#">Details</a>
<input type="checkbox"/>	9/18/12 8:32 a.m.	⚠ Weight: 165 lbs	Dr. Leonard McCoy	Nurse Ratchet - Today, 8:15 a.m. "Talked to patient about moderating tribble meat intake." <a href="#">+ Add a note</a> <a href="#">Close</a>	
<div><p><b>More Reading Details</b></p><ul style="list-style-type: none"><li>• 40 Pulse Pressure</li><li>• 100 MAP</li></ul><p><b>Thresholds</b></p><ul style="list-style-type: none"><li>• 100/80 Lower Threshold</li><li>• 130/100 Upper Threshold</li></ul><p><b>Device</b></p><ul style="list-style-type: none"><li>• ABC Blood Pressure Monitor</li><li>• Serial: #123456789</li><li>• Transmitted: 9/22/12 at 5:38 p.m.</li><li>• Processed: 9/22/12 at 6:47 p.m.</li></ul></div>					
<input type="checkbox"/>	9/24/12 11:32 a.m.	Glucose: 83	Fast	Christine Chapel	<a href="#">+ Add a note</a> <a href="#">Details</a>

<http://hcom-vnextd.medapps.net/Patients/ViewReadings>

**As a Nurse, I need to customize my viewpoint of HCOM based on my personal UI likes/dislikes, so that I can better care for my patients and want to use your platform.**

Patient page (readings) - Ability to HIDE excess information about the reading. For instance, the Transmit Date, Processed Date, Device Name and SN, but add a SYMBOL to allow User to expand this additional info when they need it.

**X INCOMPLETE** – Frontend views need to be integrated with data

HCOM is Customizable for each User - similiar to Google & Salesforce. Users can pick and choose what tabs they want to see based on how they personally use HCOM

**Note** – We've decided not to implement this in Phase 1. Instead, we're aiming for "sensible defaults" that address 90% of what users need, and in Phase 2 we'll make corrections based on user feedback.

The screenshot shows a 'Reading History' page with a header 'Reading History' and a green button '+ New Reading'. Below the header is a search bar 'Filter by date, type, notes, and more' and two buttons: 'All Readings' and 'Alerts (8)'. The main area is a table with columns: Date, Reading, Category, Reviewer, and Note. A red vertical bar highlights the 'Reading' column. The first row shows a reading from 10/02/12 at 11:32 a.m. with values 'Sys/Dis: 2120/80' and 'Pulse (bpm): 78', reviewed by Christine Chapel. The second row, which is expanded, shows a reading from 9/18/12 at 8:32 a.m. with a warning '▲ Weight: 165 lbs' and reviewed by Dr. Leonard McCoy. A note from 'Nurse Ratchet' is visible on the right. The third row is partially visible. At the bottom, there's a 'More Reading Details' section with a list of items and a 'Device' section with a list of details.

Date	Reading	Category	Reviewer	Note
10/02/12 11:32 a.m.	Sys/Dis: 2120/80 Pulse (bpm): 78		Christine Chapel	+ Add a note Details
9/18/12 8:32 a.m.	▲ Weight: 165 lbs	Dr. Leonard McCoy	Nurse Ratchet - Today, 8:15 a.m. "Talked to patient about moderating tribble meat intake." + Add a note	
9/24/12 11:32 a.m.	Glucose: 83	Fast	Christine Chapel	+ Add a note Details

<http://hcom-vnextd.medapps.net/Patients/ViewReadings>

## 22 Nurse view of patient readings

**As a Nurse, we need easier and complete viewability of patients readings, so that there is minimal button-pushing and we can easily and quickly view patient's data.**

Filter (Reading Type) - Would like to be able to add "Pulse" to the filter if possible. Also, need to improve upon the Filter and make it expand to include ALL options (all reading types) for the particular patient, for ALL pages - not just what's available on the current page.

**x INCOMPLETE** – Frontend search features need to be implemented and integrated with data

**Note** – Search will be much improved, offering immediate filtering of all data in a table, based on any keyword a user wants to type in. Additionally, the Global Search in the header will search based on free-form keywords as well.

The screenshot shows a 'Reading History' interface with a green '+ New Reading' button at the top right. Below it is a search bar labeled 'Filter by date, type, notes, and more'. To the right of the search bar are buttons for 'All Readings' and 'Alerts (8)'. The main area displays a table with columns: Date, Reading, Category, Reviewer, and Note. One row is selected, showing a reading from 10/02/12 at 11:32 a.m. with 'Sys/Dis: 2120/80' and 'Pulse (bpm): 78', reviewed by Christine Chapel. A note for 'Nurse Ratchet' is visible. Another row is partially visible below, showing a reading from 9/18/12 at 8:32 a.m. with 'Weight: 165 lbs', reviewed by Dr. Leonard McCoy. A tooltip for this entry provides 'More Reading Details' (40 Pulse Pressure, 100 MAP) and 'Thresholds' (100/80 Lower Threshold, 130/100 Upper Threshold). To the right of the table, a 'Device' section lists 'ABC Blood Pressure Monitor', 'Serial: #123456789', 'Transmitted: 9/22/12 at 5:38 p.m.', and 'Processed: 9/22/12 at 6:47 p.m.'.

<http://hcom-vnextd.medapps.net/Patients/ViewReadings>

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## Manual Readings

**As a Nurse, I need the ability to input date/time info with a manually created reading, so that the reading shows up properly in the patient's reading log.**

Ability to put in the date/time of a manually created reading and the reading itself.

**X INCOMPLETE – New Reading modal needs to be created, frontend views need to be integrated with data**



<http://hcom-vnextrd.medapps.net/Patients/ViewReadings>

**As a Nurse, I need to easily & quickly see my patient's note(s) for a reading, so that I can follow-up accordingly.**

Need to be editable (but only by the highest User Role of the Entity) (need to abide by HIPAA guidelines!)

Clean them up. Possibly a post-it icon to the side of the reading that a nurse can click on and the note pops-up.

Get rid of the extra “garbage” documented in the note (i.e. reading, date, time...), and just have the actual note visible.

Need to be printed off as their own separate Report (both Reading Notes and Patient Notes).

**X INCOMPLETE – “Add a Note” modal needs to be built into Readings view, frontend views need to be integrated with data**

The screenshot shows a patient note for Benjamin Sisko. At the top, it displays his name and vital signs: Glucose: 150, Weight: 210, and Midichlorians: 400. Below this, there is a note from "Nurse Ratchet" dated "Today, 8:15 a.m." with the text: "Called Bob, asked him a few questions about Jedi abilities." To the right, there is a sidebar with patient details (ID: 1234567, phone: 444-444-4444), diagnoses (Space Madness, Moon Lung), and medications (Dihydrogen Monoxide - 3mg, twice daily). At the bottom, there are "Next Steps" options: Write note, Choose alert reason, Add a task, and Complete review. A text area for writing a note is present with a "Save Note" button.

<http://hcom-vnextd.medapps.net/Alerts>

<input type="checkbox"/>	9/24/12 11:32 a.m.	Glucose: 140 lbs	Christine Chapel	+ Add a note	Details
<input type="checkbox"/>	Admitted: 9/18/12 Discharged: 9/21/12		Nurse Ratchet - Today, 8:15 a.m. "Patient admitted for phaser injury."	+ Add a note	

<http://hcom-vnextd.medapps.net/Patients/ViewReadings>

## 25 Nurse View of Patients

**As a Nurse, I need to quickly & easily see what patients are in the queue and at what stage, so that I can address the most critical ones first, start the process on others, and come back to other patients later.**

Customers have stated that they need more than either "reviewed" or "not reviewed."

There needs to be a "Pending" or "still working on" group

Honeywell had a Purple Bucket Group of "On Hold Patients"

**x INCOMPLETE** – Frontend views need to be integrated with data & alert logic

**Note** – All alerts are shown to staff members in the patient's Group. When a staff member clicks the "Review" button, the alert is removed from other users' queues, and the edge color changes to periwinkle. The user's in-progress alerts are shown at the top of the queue, as well as in a separate tab of the Alerts widget on the Dashboard.

The screenshot shows a web-based application titled 'View Alerts' under development. At the top, there are tabs for 'Alerts' (selected) and 'Reviewed'. A search bar and a task list sidebar are also present. The main area displays a list of alerts for Kirk, James, Sisko, Benjamin, and Pike, Christopher. A detailed view of an alert for Benjamin Sisko is open, showing his ID (1234567), contact information (444-444-4444), diagnoses (Space Madness, Moon Lung), and medications (Dihydrogen Monoxide - 3mg, twice daily). The alert details mention a glucose level above the upper threshold of 98 and a weight above the upper threshold of 200. The 'Next Steps' section includes options to 'Write note', 'Choose alert reason', 'Add a task', and 'Complete review'. A note from 'Nurse Ratchet' is shown: 'Called Bob, asked him a few questions about Jedi abilities.' A 'Save Note' button is available. The task list sidebar on the right lists various follow-up tasks for different characters, many of which are checked off.

<http://hcom-vnextd.medapps.net/Alerts>

**As an Entity, I need to make sure my Nurses/Reviewers are alerted for multiple reasons, so that we can act accordingly for our customer and ultimately our patient.**

**CAUSES for Alerts**

1. Threshold Alert (when reading violates threshold)
2. No Readings Taken Alert (after ""x"" hours)
3. Trending Alert (over a period of time (ie. days) a reading type (ie. weight) has gone up or down ""x"" much.)
4. Their DMP Answers trigger an Alert

Note: Entity can pick and choose which type(s) of Alert(s) they want to see

**X INCOMPLETE** – Frontend views need to be integrated with data & alert logic

**Note** – Entities cannot choose what type of alerts they see – at least not in Phase 1.

 Kirk, James	- Reviewed by Dr. Beverly Crusher - Today, 8:06 a.m.
 Dax, Jadzia	- Reviewed by Dr. Julian Bashir - Yesterday, 7:11 p.m.
 O'Brien, Miles	- Reviewed by Dr. Beverly Crusher - Today, 8:06
 Troi, Deanna	- Reviewed by Tom Paris - Today, 8:06 a.m.
 Sato, Hoshi	- Reviewed by Dr. Katherine Pulaski - Today, 8:06 a.m.
 Archer, Jonathan	- Reviewed by Christine Chapel - Today, 8:06 a.m.
 Scott, Montgomery	- Reviewed by Dr. Leonard McCoy - Today, 8:06 a.m.

**As an Entity, I need to make sure my Nurses/Reviewers are alerted in various ways if available, so that we can act accordingly and in a timely manner for our customer and most importantly our patient.**

#### Types of Alerts SENT to NURSE

1. Email Alert to Nurse and/or HCOM Message Center
2. Text Alert sent to Nurse
3. IVR Phone Call made to Nurse

**X INCOMPLETE – E-mail alerts**  
available in Threshold view, but need to be implemented. Other alert types need to be added to view and implemented.

Target Range  to

Fasting (pre-meal) threshold  
 Add a warning (yellow) threshold

Warning (Low)   
Readings between **79** and **81** will trigger a warning. Readings *below 79* will trigger an alert.

Warning (High)   
Readings between **99** and **105** will trigger a warning. Readings *above 105* will trigger an alert.

Notifications  Send an e-mail for alerts  
 Separate multiple addresses with commas  
 Send an e-mail for warnings

<http://hcom-vnextd.medapps.net/Thresholds/Edit>

**As a Nurse, I need my patient to be able to be alerted, so that if necessary we can quickly trigger a call to the patient, send reminders to the patient, and trigger questions for the patient to answer.**

#### **Types of Alerts SENT to PATIENT**

1. IVR Call to Patient
2. Email to Patient
3. HCOM prompts HHUB to ask Q's & A's to Patient
4. Real Monitoring Staff calls Patient
5. Reminder Alerts sent to Patient - "You have a Dr. Appt. 8/8/12 @ 10am" - "Drinking 8 glasses of water a Day..." - "Good Job!"

If an email feature happens in next design, the Nurse needs to be able to click on an Email button which allows her with one click to email patient. Email should come from Nurse's email address registered in HCOM (rather than "noreply@medapps.com" as in current design.) Patient's email is autopopulated and email is secure. Emails get recorded in the Patient's records. Emails can also be

## 28 Patient Alerts, *continued*

easily CC'd to the Patient's authorized Caregivers (husband, daughter, son, etc.). As long as everyone is verified and emails are secure.

**X INCOMPLETE** – E-mail alerts not yet added to Patient view. Will need to be implemented.

## 29 Hospital Admission Tool

**As a Nurse, I need to mark that my patient has been admitted to the hospital, so that I can indicate the reason, the time period, and not be alarmed that my patient has not taken readings (due to being admitted and not at home).**

Nurse can click and mark that a patient has been admitted to the hospital.

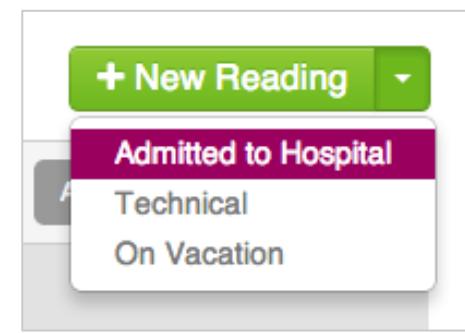
This would show that the patient cannot physically take their scheduled readings and therefore no alerts would occur to the Nurse (such as the daily No Reading Taken Alert).

If Nurse selects this button, she is prompted with a series of Q's such as: "Was the Patient admitted to the Hospital because you/someone from your company advised them to?" or "Patient was admitted to Hospital unknowingly to Nurse or Nurses Company." etc.

Admission Report and their regular "reading report" documents the timespan that the Hospital Admittance occurred. (This is important as Jessica @ Saad pointed out (email 1/18) that a report is given to the doctor now, and

Status ▾	Name	D.O.B.
H	Pike, Christopher	09/10/2216

<http://hcom-vnextrd.medapps.net/Patients/ViewList>



H Admitted: 9/18/12 Discharged: 9/21/12	Nurse Ratchet - Today, 8:15 a.m. "Patient admitted for phaser injury." + Add a note
---	---

<http://hcom-vnextrd.medapps.net/Patients/ViewReadings>

## 29 Hospital Admission Tool, *continued*

the doctor doesn't see why the patient missed a week's worth of readings...in the report it needs to show the days the patient was in the Hospital.)

Within Patient's Readings screen, a line item similiar to a reading line item, states: "Patient admitted in Hospital - cannot take readings at this time."

**X INCOMPLETE** – Need to create modal for questions. Add Reading function needs to be implemented. Patients show “Hospital” status in current views, but status indicators need to be implemented.

## Delete Readings

**As a Nurse, I need the ability to delete readings, so that I can keep my patient's data clean and accurate; the readings needing deleted may be test readings or the patient's grandson's reading, etc.**

Ability to Delete Readings - but according to HIPAA guidelines and would require User to answer "Why?" and reading would be moved to an "archived" folder, not truly deleted.

**X INCOMPLETE** – Need to add Delete/Archive method to Readings view. Will need to be implemented.

## Mark False Alerts

**As a Nurse, I need the ability to mark readings as false, so that they do not affect the overall review of the patient and are not included in patient's reading report.**

Checkmark False Alerts and when they create a patients graph, you give them the option to include or not include the False Positives into the Report.

If a nurse marks a reading as False Alert, she is asked a quick survey to help determine the reason for the False Alert. (i.e. Was it user error using the equipment? Was Patient sharing equipment with friends or relatives? Is it an issue in our HPAL that is causing the problem?).

Having this type of information will be valuable to have for our Product design and improvement team.

**X INCOMPLETE** – Need to add Delete/Archive method to Readings view. Will need to be implemented.

## 32 Constant Contact Alerts

**As a Customer Support member, I need Constant Contact and HealthCOM synced, so that I can proactively alert my customers and keep our Contact List up to date.**

HCOM has a News Section  
called: "News from Alere"

All HCOM User email addresses will be linked to Constant Contact through API so we don't have to remember to update our Constant Contact List all the time (it downloads it from HCOM before we make announcements.)

So Constant Contact Alerts are both emailed to HCOM Users and stored on HCOM in the "News from Alere" section.

**X INCOMPLETE** – Not yet implemented.

**Note** – Recommend using a provider other than Constant Contact, for reliability and usability reasons, as well as the ability to send transactional emails through the same system.

## 33 Group (Patient) Reporting

**As a Nurse, I need different reports available, so that I can choose the group I want a report for (i.e. Diabetes patients, Dr. Smith's patients, patients sent to ER).**

### By Disease Type

**By Doctor in Charge** (Jessica @ Saad REALLY needs this. It helps her run reports for the Doctor and prove that the RPM is working for him. Good results helps her get more orders from the Doctor and more orders for her equals more orders for us.)

**By Entity/Group** you segregated them as

**By # of times they were admitted to ER** (Jessica @ Saad needs to know 1.) When they went to Hospital 2.) What they went in for (Shortness of Breath, UTI, GI Bleeding) and 3.) How long they were there. Why? She says: "If the patient was hospitalized for the condition we are monitoring, then we are penalized for it. If it is not related, we are not."

Note: All Reports can be exported to:

The screenshot displays a web-based reporting system with a dark purple header. The header includes navigation links for Dashboard, Alerts (with 3 notifications), Quick Links, Reports, and a search bar. Below the header, the main content area is titled 'Reports' with a sub-note 'Under development'. The page is organized into several sections: 'Patient Report' (with a line graph showing a patient's weight over time, currently at 180 lbs), 'Compliance Report' (showing active diabetes at 82% and active hypertension at 63%), 'Activity Log' (listing recent events like new device additions and patient records), 'Inventory Report' (listing pulse oximeters: Abbot Freestyle Lite, Abbott Freestyle Freedom Lite, and Nipro TrueBalance), 'Technical Issues Report' (with a placeholder message 'What does this report look like?'), 'Group Reports' (with a pie chart showing 30% in blue, 10% in red, and the rest in purple), and an 'Alero™ Admin Report' (with a line graph showing 3 admits). The bottom right corner of the screenshot contains the URL <http://hcom-vnextd.medapps.net/Reports>.

## 33 Group (Patient) Reporting, *continued*

PDF, Excel, Word, CSV, etc. and can be emailed to an authorized person with a click of a button. For time being PDF is most important (Word and Excel can be manipulated by user - HIPAA issues?).

**X INCOMPLETE** – Reports views not yet created, will need to be implemented.

**As a Company / Entity, we need logic in place to integrate with various platforms, so that we can expand to (and be available to) other systems / we can use our own system to pass data into.**

Need to create subsystem that is similar to a Health Information Exchange (HIE) to allow us to connect and pass data to Electronic Health Reports easier, in various formats.  
(Chameleon, Iguna)

Need the ability to interface to Customers Clinical backend system easier, with most of the work being done by them. (SDK, etc.)

EHRs, PHRs, EPIC, MyChart, AllScripts, Cerner, etc.

HL7

Pass through Data

Need a special subsystem / section for customers that don't use the HealthCOM system, but HealthCOM passes the data through to their

## 34 Interface to Outside Data, *continued*

backend system.

**X INCOMPLETE** – Status unknown

## 36 Customizable Reports

**As an Entity, we need customizable reports, so that we can generate the necessary reports that apply to our Entity and program.**

UI for User to customize their reports  
(check boxes or drop-down  
functionality) to pick and choose what  
is on their report

**X INCOMPLETE** – Reports views not  
yet created, will need to be  
implemented.

## Automatic reports

**As a Nurse, I need a report automatically sent to me weekly, so that I can quickly & easily see how my patients are doing week to week without logging into system and generating it myself.**

Automatic Reports - emailed to Nurse, Doctor, etc. for the time they specify (ie. Daily, Weekly, Monthly) (HIPAA, encrypted emails)

Jessica @ Saad Healthcare has to physically login once a week and generate reports for each and every patient of hers. In the beginning of her program, she didn't have a lot of patients, but now she has many. It takes a lot of time for them to individually one by one, go into a patients profile and generate and print a report for each and every patient they have. If they could select patients names, and specify a date range, they could in one-click print reports for all of their patients.

**X INCOMPLETE** – Reports views not yet created, will need to be implemented.

## 38 Patient Reports (for Nurses)

**As a Nurse, I need different reports available, so that I can choose the group or type of report I need.**

### **Reading Reports**

(i.e. By Modality Type, Date Range, Graphical as well as documents each reading that occurred during the time period)

### **Notes Report**

(Nurses Notes)

### **Summary Report**

(i.e. When patient started RPM, how many times they were admitted to hospital since being on RPM, how many hospital avoidances happened while on RPM, all the Patient info written in system about Patient such as address, Caregiver Contact Info, Medication info, etc.)

### **Hospital Admission Report**

(i.e. Shows how many times, what date spans Patient was in Hospital)

### **Medication Report**

## 38 Patient Reports (for Nurses), *continued*

### **List of Conditions Report**

### **Outcomes Report**

### **Patient Health Status Report**

Note: All Reports can be exported to:  
PDF, Excel, Word, CSV, etc. and can  
be emailed to an authorized person  
with a click of a button. For time being  
PDF is most important (Word and Excel  
can be manipulated by user - HIPAA  
issues?).

**X INCOMPLETE** – Reports views not  
yet created, will need to be  
implemented.

## 39 Cross-environment "bridge"

**As a Customer Support member (or Sales or IT), I need a bridge between all environments (P, T, Q, D), so that I can quickly & easily move devices and Kits between areas.**

Would like to have a "Bridge" between all environments to allow for easy moving of Kits and Devices between Prod, Train, QA, and Dev.

**X INCOMPLETE** – Status unknown

## 40 DSL Upload

**As a Customer Support member (or Sales or IT), I need better messages and more efficient means to upload DSLs or devices, so that the process is more efficient.**

Ability to successfully, efficiently, and logically upload a DSL in HealthNET regardless of components (i.e. Kits, HPs only, OEM device(s) only) -- also see below "Add Multiple Devices" (use the DSL Upload if uploading multiple devices and device types, use the Add Device if uploading multiple devices of the same type) ???

More detailed error messages, and ability to know if and where the system left off when uploading if an error did occur during process

Currently if you have a DSL with various SIM Card Carriers within, you have to manually break them up into various spreadsheets for each Carrier Type – b/c Order File Upload only allows one (1) Carrier Type per DSL Upload. However, SIM Card Carrier is a column header within the DSL, so perhaps in the new revision, we can make it pull the Carrier Type from the

40 DSL Upload, *continued*

DSL?

**X INCOMPLETE** – Status unknown

**As a Company that may bring IVR back into our system, it needs to be much more robust than our current (nonimplemented) design.**

2-way communication between HCOM & HPAL through IVR. (ie. nurse can press the IVR button in HCOM, choose the set of questions she wants to ask patient, and it goes to HPAL which asks the patient the Q's. Then the A's come back and get recorded into HCOM)

Nurse can customize IVR message, or pick from our preconfigured DMP Scripts

Make a note/log of the IVR call & specific Q's & A's asked and answered to the specific reading that prompted the call within the patients record AND in an "IVR Tab Summary List".

If a RED reading comes through to HCOM, the HPAL automatically tries to ask the Patient a series of Q's based on the Reading Type

If the patient doesn't answer the Q's

right away, a nurse can click on the (red) reading within HCOM and initiate a reminder or another IVR call to patient.

**X INCOMPLETE – Status unknown**

## 42 Outbound IVR

**As a Nurse / Customer Support, I need IVR/automated call routing, so that I can quickly and easily contact a patient, be contacted by a patient, and have the patient's profile automatically populate on my screen, and have these calls recorded/logged.**

Need the ability to make outbound calls to collect additional information

Need Ability to Route Incoming Patients to their Caregiver, or available Skilled Caregiver

Need the ability to Popup the Patients record on the Screen when the Patient calls in

Outbound Calling to ask the Patients to take their readings (Phone system interfaces/integrates with HealthCOM)

**X INCOMPLETE** – Reports views not yet created, will need to be implemented.

**As an Entity, we need Inventory Reports, so that we can keep track of deployed Kits, available Kits, etc.**

**Kit List Report**

(Unassigned, Assigned, percentage of inventory remaining, deployed)

**Device List Report**

(Unassigned, Assigned, percentage of inventory remaining, deployed)

Note: All Reports can be exported to: PDF, Excel, Word, CSV, etc. and can be emailed to an authorized person with a click of a button. For time being PDF is most important (Word and Excel can be manipulated by user - HIPAA issues?).

**X INCOMPLETE** – Reports views not yet created, will need to be implemented.

**As a Company, we need various reports available, so that we can automatically generate reports for management regarding # of HPs sold, deployed, list of users, etc.**

**Number of HealthPALs SOLD** (and to who, and when so we can calculate per/month, per/year)

**Number of HPALs deployed** (# of HPs currently assigned to Patients)

**Number of HPALs kits not deployed** (# of HPs currently NOT assigned to Patients)

**Number of NEW Patients added** (per day, per month, per Entity, per Sub-Entity)

**List of Users within all Areas of HCOM**

**List of Entities & Sub-Entities**

**Metrics Report**

**Activation Report:** 1st - 15th of the month, then 16th - end of month,

## 44 Admin Reports, *continued*

keeps track of Alere devices (i.e. HealthPALs) that are activated (turned on - SIM). Date is date of initial activation regardless of HP's "status" (assigned/unassigned from a Patient). Additionally, can see the # of HPs activated (throughout System, Entity, Sub-Entity) and # of HPs not activated (throughout System, Entity, Sub-Entity).

**X INCOMPLETE** – Reports views not yet created, will need to be implemented.

**As a Company, we need to streamline our HNET system, so that we can more efficiently work with it.**

Manufacturer (still applicable?)

Remove all entries with the exception of: Abbott, AnDMedical, LifeScan, MedApps (Alere), Nonin, and Bayer. And add Nipro.

Need to Cleanup Manufacturer, Device Type and Device Model Tables.

Also possibly pertains to old data in HealthCOM such as old Entities that can be "hidden".

Perhaps give this access also to Support?

**X INCOMPLETE – Status unknown**

## 46 Archiving Old Patients

**As a Nurse, I need a screen showing non-active patients, so that I can still view their readings if necessary in the future.**

Patients that are no longer using HPAL equipment need to be moved to a History Section where Nurses can access their old readings, reports and all data if they ever need it in the future.

But removed from the User's Home page in HCOM (if a HP is unassigned from a Patient, that Patient should be removed from the HCOM Home page - if they remain they will constantly show as "Red").

**X INCOMPLETE** – “Archived” tab available in view, needs to be implemented.

# View Patients Under development

**Active** **Archived**

Filter by patient name, diagnoses, group, and more

	Status ▾	Name	D.O.B.	ID
	<input type="checkbox"/>	Pike, Christopher	09/10/2216	07221959

<http://hcom-vnextrd.medapps.net/Patients/ViewList>

**As a Customer Support member (or Sales or IT), I need multiple #s Search function in HNET Kit List, so that I can be efficient in searching for multiple Kits and assigning/unassigning them at once.**

Kit List: Kit List in HealthNET, would be nice if it had the ability to search for multiple #s in one search and the ability to unassign multiple Kits at once.

**X INCOMPLETE** – Not sure if multi-search feature will be incorporated in Phase 1, but multiple-unassign *will* be implemented.

48 HNET and HCOM are one system

**As a User of MedApps/Alere System, I need Device & Inventory (HealthNET) functionality within the same system (HealthCOM), so that I only have to log-in to one system.**

Make HealthNET a subset of HealthCOM. Visibility and functionality will be based on User Role.

✓ COMPLETE

## 49 Minimize button-pushing

**As a Nurse, we need easier and complete viewability of patients readings, so that there is minimal button-pushing and we can easily and quickly view patient's data.**

Want to be able to see Pulse automatically instead of having to expand the BP reading

**x INCOMPLETE** – Reading views need to be connected to data

Date ▾	Reading	Category
10/02/12 11:32 a.m.	Sys/Dis: 2120/80 Pulse (bpm): 78	

The screenshot shows a medical software interface. At the top, there is a header with the date (9/18/12), time (8:32 a.m.), and a red warning icon followed by the text "▲ Weight: 165 lbs". To the right of the header, it says "Dr. Leonard McCoy". On the far right, there is a note from "Nurse Ratchet" and a "Close" button. Below the header, there are two main sections: "More Reading Details" and "Device". The "More Reading Details" section contains a bulleted list: "• 40 Pulse Pressure", "• 100 MAP", and a "Thresholds" section with "• 100/80 Lower Threshold" and "• 130/100 Upper Threshold". The "Device" section also has a bulleted list: "• ABC Blood Pressure Monitor", "• Serial: #123456789", "• Transmitted: 9/22/12 at 5:38 p.m.", and "• Processed: 9/22/12 at 6:47 p.m."

<http://hcom-vnextd.medapps.net/Patients/ViewReadings>

## 50 API Integration Notes

**As a Company, we need to be responsible and know where all of our SIMs are, so that we can audit our carriers and make sure we are not overpaying for SIMs that we are not using. We need to also live by our word and prove that we really do know the health of our devices so that customers trust us and want to do business with us. We need to make it easier for Customers to buy product from us and activate it when they are ready to use it so that we can make more sales (and not prohibit sales from happening like in our current business model.)**

### **API Integrations with Carriers**

KORE, Wyless, and AT&T all offer API Integrations into their backend systems

This information is imperative for us to have and we could do so much with it!

Our SIM cards could be organized and maintained optimally within both HCOM/HNET and our overall HealthPAL.

Doing this would prove our point that MedApps (Alere) truly is a Platform that supports and knows “the health of our devices.”

Add button in HCOM for Nurses to ""Activate SIM in HPAL"" in one

## 50 API Integration Notes, *continued*

click. This action also ""turns on"" the billing!

Button is accessible by Inventory Role Level

They can only ""activate"" SIMs, not turn them off (unless see below...)

**X INCOMPLETE** – Status unknown

## 51 Easy Connect to HealthVault Button

**As a Nurse, I need the ability to send HealthVault instructions to my patient, so that I do not need to wait for Company to send & Patient can quickly get linked to the PHR.**

Button in HCOM that can be pressed and will automatically email Patient for Microsoft HealthVault registration instructions.

Once patient follows instructions and links kit, an email is sent to Nurse to alert her that patient did it. (I believe we may already have this in place in current HCOM: an auto. email confirmation is sent to Support stating a patient was created and the link was made to HealthVault; may be able to use existing functionality?)

Any other EHRs / PHRs? Also need to ensure system supports: CCD, CCR, HL7, etc.

**X INCOMPLETE – Status unknown**

**As a Nurse, I need to see the most recent readings sent by my patients, so that I can make the best judgment for my patient at that time.**

HealthCOM needs to automatically refresh itself each time a new reading is received.

**X INCOMPLETE** – We won't force a page refresh (could cause users to lose their work, which would be frustrating), but we will show new incoming alerts as popup messages, with a link to the full alert.

**As a Company, we need our systems to be compatible with more (& eventually all major) web browsers, so that we can be available to more customers and not be limited.**

HealthCOM needs to be viewable in  
ALL Web Browsers

**X INCOMPLETE** – Final browser testing to be done after most other functions are complete.

**As a Company, we need our systems to be efficient, powerful, flexible, and scalable, so that we can grow effortlessly and accommodate 1000s of customers & their patients.**

Needs to be built with the mindset that this is going to hold 100s of thousands of Patients.

10s of thousands of Customers

Can't get bogged down

Some requirements / changes include MVC, .Net Studio 2010, etc. (Kent)

✓ **COMPLETE** – Pending testing

## 56 Languages

**As a Company, we need our systems to be flexible and scalable, including available languages, so that we can cater to our customers both domestically and internationally.**

Click a button to switch HCOM site to Spanish, and other languages. (Honeywell has 17 language options) (ideally French and German first for Alere UK)

\*English only in the first phase - but the infrastructure needs to be put in place now for future languages.

✓ **COMPLETE** – Functionality built, but more work required to actually translate the application text



<http://hcom-vnextd.medapps.net>

**As a Nurse / Customer Support, I need to quickly & easily import or export in bulk, so that we can quickly & easily upload things in bulk or retrieve data in bulk when necessary.**

Import / Export Bulk capability.

**x INCOMPLETE** – Bulk pages need to be created, design needs to be migrated from staging site, functions need to be implanted.

## Bulk Upload Patients Under development

Use the form below to upload your Excel-format spreadsheet, or download the pre-built [template file](#).  
*Just want to add one or two patients? Try the [New Patient](#) page.*

UPLOAD SETTINGS

File\*

Make sure you save your file as an .xls, .xlsx, or comma-delimited .csv.

Add to Group\*

## 58 Entity Search

**As a Customer Support member (or Sales or IT), I need a Search function in the Entity home page, so that I can quickly locate an Entity.**

Add "Search" functionality to Entity page

**X INCOMPLETE** – This functionality will be provided from the Global Search, which needs to be implemented.



<http://hcom-vnextd.medapps.net>

59 "MA Device List" to "FOTA"

**As a Company, we need to logically name features available in HCOM so that our system is easy to understand and use.**

Change "MA Device List" name from MA Device List to "FOTA" or something more fitting.

**X INCOMPLETE** – Status unknown

## 60 Nurse MedApps and Entity views

**As a Nurse, I need the ability to see which of my HPs are updated, and which of them aren't, so that I'm able to send out the appropriate HPs to my patients and keep all of my HPs up to date with the latest FW.**

Have two (2) different views?:

"MedApps (Alere) view" and "Entity view". (not just for this page but for all site - to include more info in MedApps view such as SIM # which we would not want our Customer to know...)

"MedApps view" - can see SIM card number and other information (either on this page or a different page)

"Entity view" - cannot see SIM card number, only HP #, set up HP for FOTA, HP Carrier, and HP's previous, pending and current FW

**X INCOMPLETE** – Views will be rendered depending on User Role.  
Device tables need to be connected to data and properly filtered by Role view.

Serial	Type	Model	Carrier
<b>2456789</b> MAC: 01-23-45-67-89-AB	Base Device	HealthPAL MASC-NI105 Medapps	Orange SIM: 1234567

## 61 Search for multiple things at once

**As a Customer Support member (or Nurse), I need multiple #s Search function in HCOM (& HNET) in the various areas, so that I can be efficient in searching for and working with multiple Kits at once.**

Need to be able to Search by one or multiple S/Ns (or Patients) in all levels of Inventory. (Levels: Client List, Assignments, Device List, Kit List, Kit Configurator [MA Device List already has this ability])

**X INCOMPLETE** – Need to determine if we can support multi-item searching in a way that is clear to users

**As a Nurse, I need a simple, easy to use UI that is to the point and not full of clutter, so that I don't get distracted and can focus on taking care of my patients.**

Don't clutter the new HCOM system with stuff we don't have yet - no matter what.

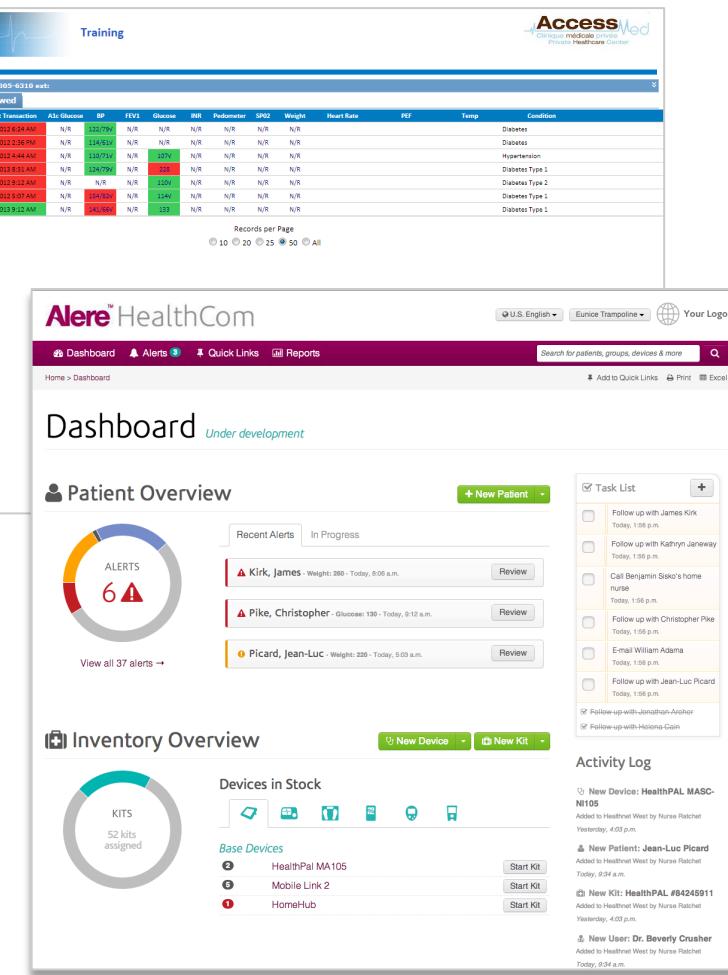
- Customize columns visible for Entity or User.

✓ **COMPLETE** – Rather than use customizable columns (*which could cause their own issues: losing a column, extra help text to explain how they work, extra clutter from adjustable handles*), we've trimmed the main views down to the essential functions for 90% of users, based on an informed understanding of our users' goals.

Additional details, settings, and information are only a click away for advanced users or “edge cases,” and analytics data from users will help us refine the views as we proceed, post-launch.







64 Firmware must confirm SIM# and Carrier

**As a Customer Support member (or Sales or IT), I need firmware in HealthPal that will confirm SIM # and Carrier, so that the info on file for HealthPal is always accurate.**

Have HPAL confirm to HCOM what SIM # / brand it has in it. Is there a way to have HP confirm or communicate what SIM Card is in HP and send to HCOM? (would verify/document in the below page - "MA Device List")

**X INCOMPLETE – Status unknown**

## 65 Update device remotely

**As a Nurse or MedApps (Alere) Employee, I need access to updates, so that I can take part in the health of the device and update FW and Drivers as needed.**

Firmware Version Control – The ability to see the current version of Firmware (for HealthPAL / HealthAIR) devices, drivers, etc., and to schedule Firmware / Driver updates. This functionality has to be available to Customer Service and the Enterprise Customer to control.

**X INCOMPLETE** – Status unknown

66

Allowed to Purchase OEM outside Alere and add to our system

**As an Entity, we need to have ability to add OEM devices that we purchased on our own, so that we can use product we already have on-hand and, we need the ability to purchase the devices on our own and have the freedom to add without assistance from Support.**

Allowed to Purchase OEM outside  
Alere and add to our system?

If so we give them the rights to upload  
S/Ns and MAC Ids to our system by  
uploading Excel Spreadsheet?

Before they upload they pay a "Add  
Device Fee/Per Device"

**X INCOMPLETE – Status unknown**

67

## Require authorization from device before uploading

**As a Company, we need logic in HCOM that will prevent wired device readings from uploading, unless the patient paid us to do so, so that we don't lose money as a company.**

Readings don't upload to HealthCOM unless their S/Ns were added to the system (either because they purchased the wired devices from Alere and we uploaded them, or they paid a fee to upload the wired devices to our system)

**X INCOMPLETE – Status unknown**

## 68 Live XML Feed for Support from HealthCOM

**As a Customer Support member, I need live feed of HP, so that I can effectively assist our customers/patients with troubleshooting (if possible).**

Troubleshooting feature in HP and HCOM? Would this be in the "Cloud" / Driver Model? Being able to see a live feed of HealthPAL.

**X INCOMPLETE – Status unknown**

69

## Data Coverage Maps

**As a Nurse, I need access to data coverage maps, so that I can deploy the proper HP Carrier to my patient.**

Add a link (page) to left-hand navigation within HealthCOM that will allow Nurses (Users) to use the Carriers' Data Coverage Maps to ensure proper HP Carrier for a Patient for a given area. (or type in zip code and we tell them the best one to deploy)

**X INCOMPLETE – Status unknown**

## 70 Glucose Readings for Canadian meters

**As an Entity, we need HCOM designed to be able to accept and properly upload Glucose readings from Canadian meters. (And UK and France)**

HealthPAL's firmware needs to be updated (if not done so already) to accommodate this requirement, both visually and audibly

HealthCOM needs to accommodate UK and France (& Canadian) glucose readings (as well as other modalities and units of measure); Canadian glucose - mmol/L

**X INCOMPLETE – Status unknown**

## Webservice API security

(From email between Fadi/VRI & Josh/MA) "Think it's a good idea if we can add user name and password for authentication and do not use certificate?"

Bottomline - need to ensure site is secure including the API side with both MA's and Customer's certificates or the like.

**X INCOMPLETE – Status unknown**

Tier of service? Similar to "functions available" to a user. View readings only; View readings with X report; View readings with X, Y, & Z reports.

**X INCOMPLETE** – Status unknown