HealthCom v2 User Stories

Prepared by Melanie Wilke | May 1, 2013

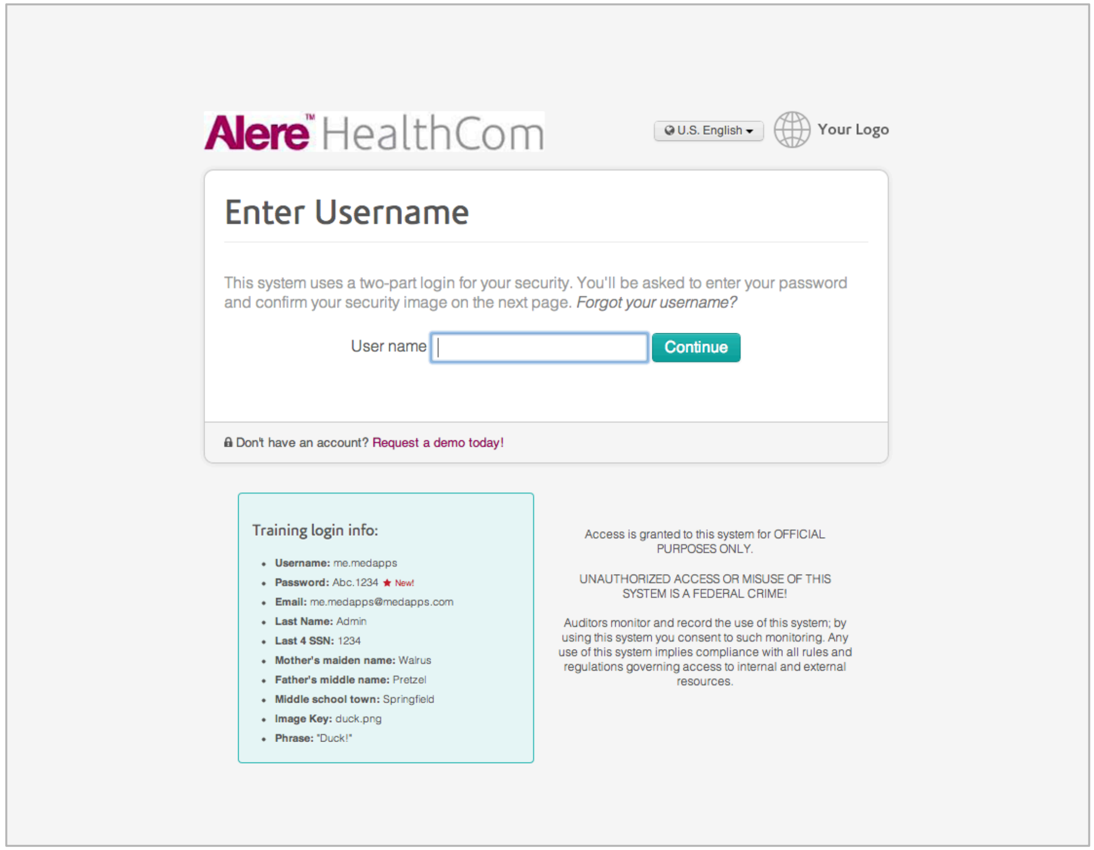
HealthCOM Login Notifications

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 maintenences, 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 being 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.

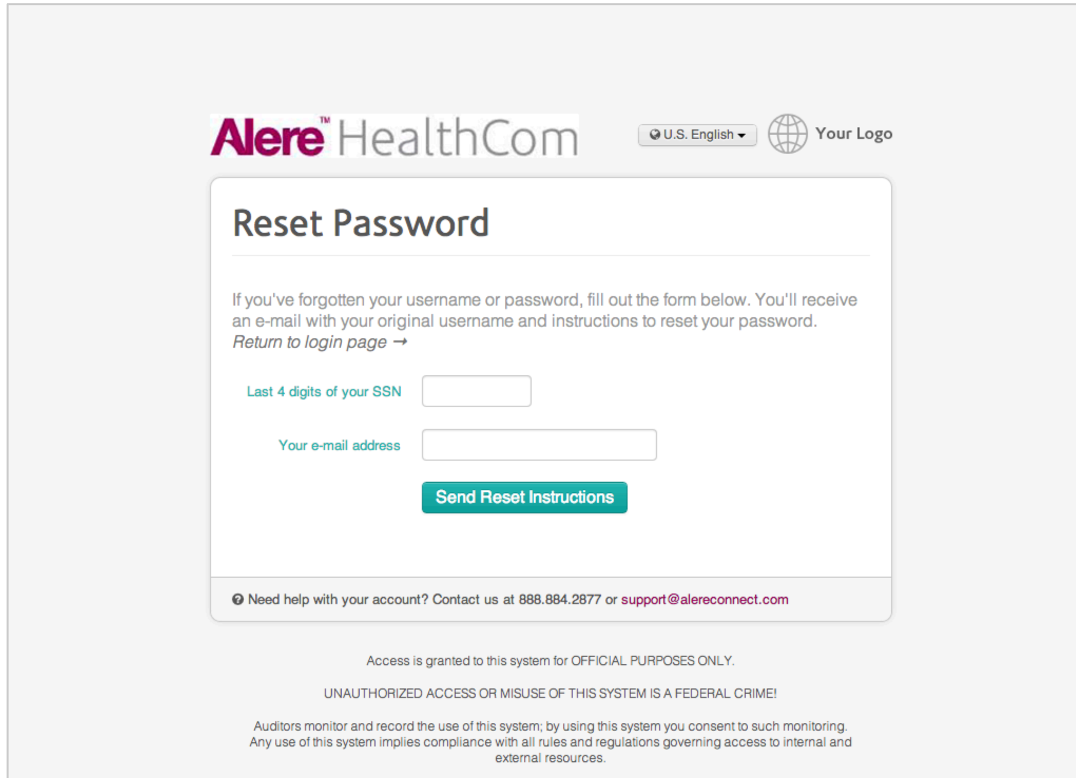


http://hcom-vnextd.medapps.net/Account/EnterUsername

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?)
✘ **INCOMPLETE** – Not implemented, and e-mails still need to be redesigned. Unable to test without “create user” functions.



http://hcom-vnextd.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.

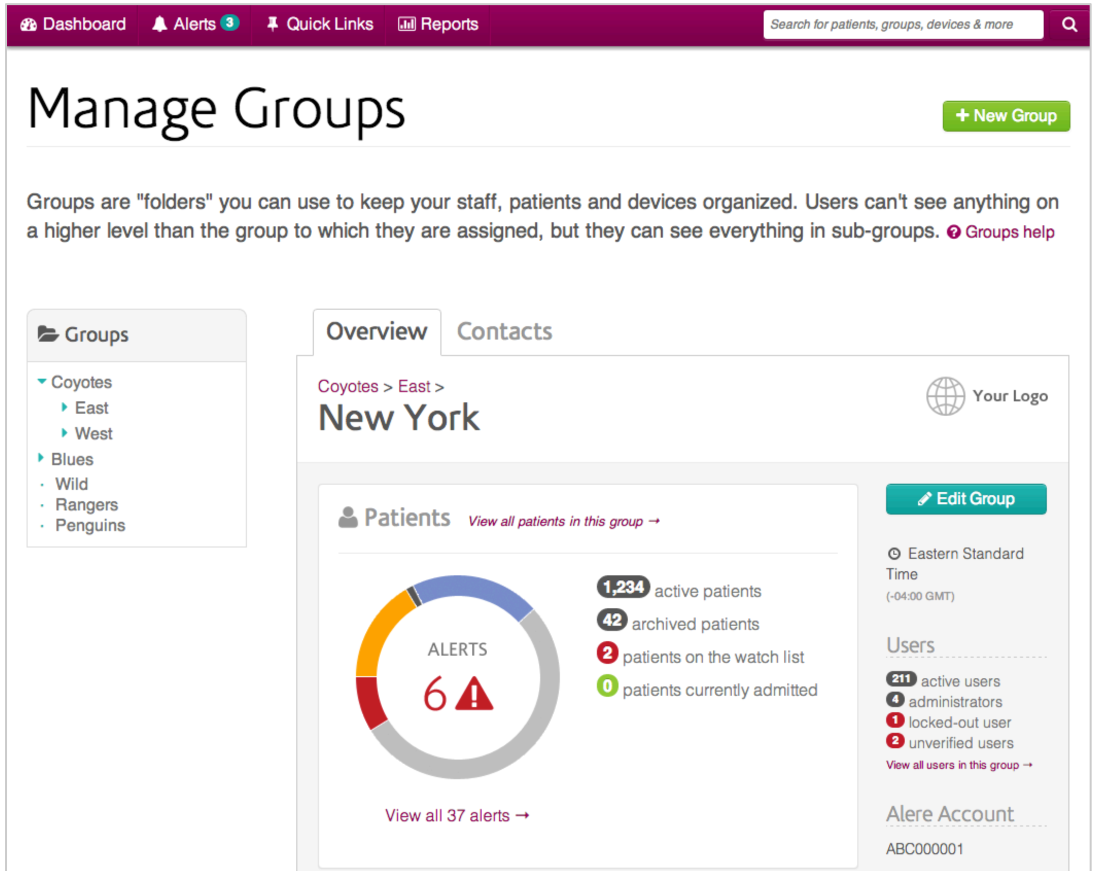
Architecture Change - Zero Levels is recommended (or more levels if we have to)

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).

✘ INCOMPLETE – Frontend views need to be connected to Groups logic



http://hcom-vnextd.medapps.net/Groups

4 User Roles

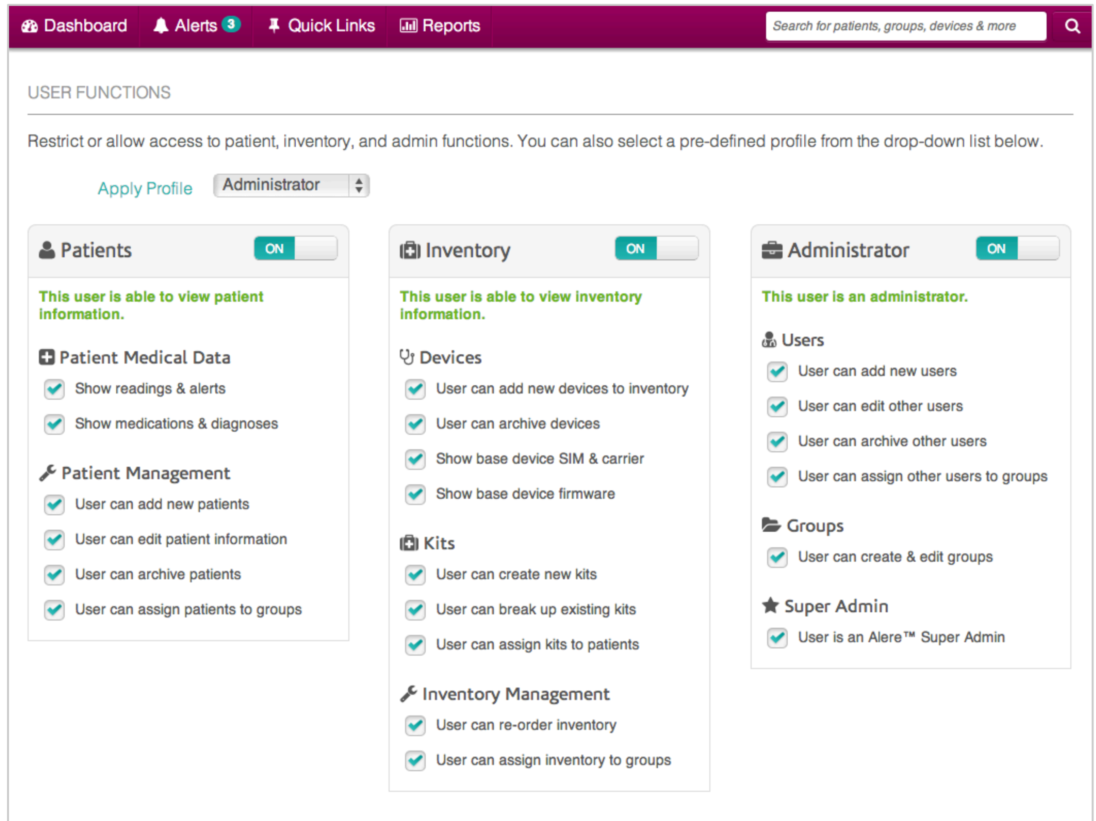
As a Company, we need more user role levels and intuitive user role names within HealthCOM, so that we can expand our capability & functionality and be able to cater to more Entities.

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.

✘ INCOMPLETE – Frontend views need to be connected to user role logic



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

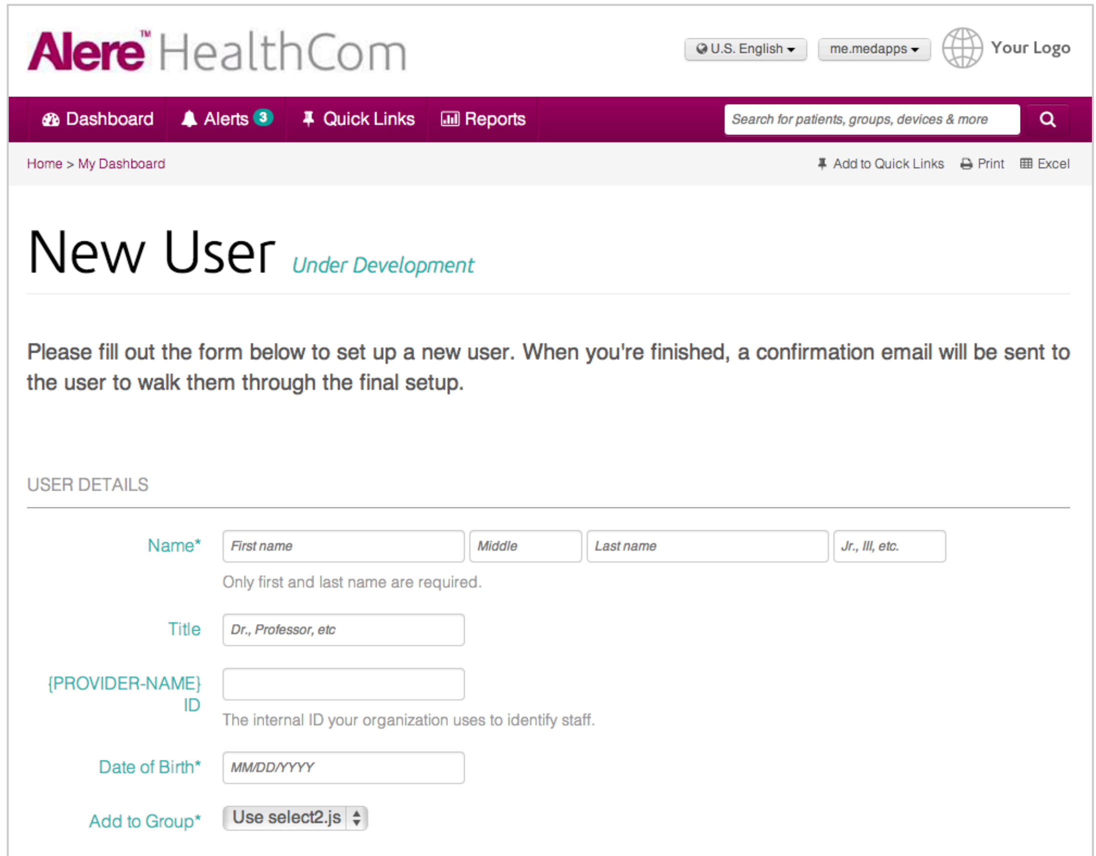
5 User Creation

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

User receives a Welcome email and temporary password to create their account
✘ **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.
✘ **INCOMPLETE** – First-time login functions and pages need to be implemented



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.

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

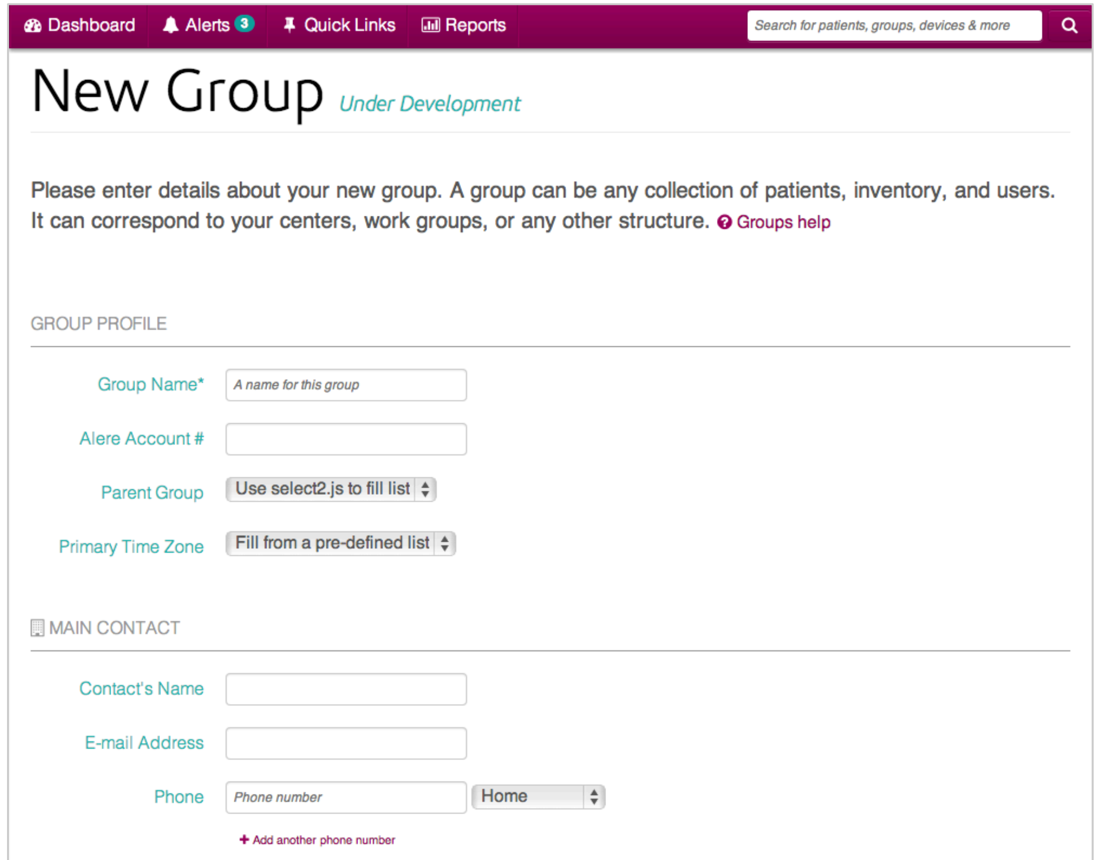
6 Richer entity data

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.

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

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



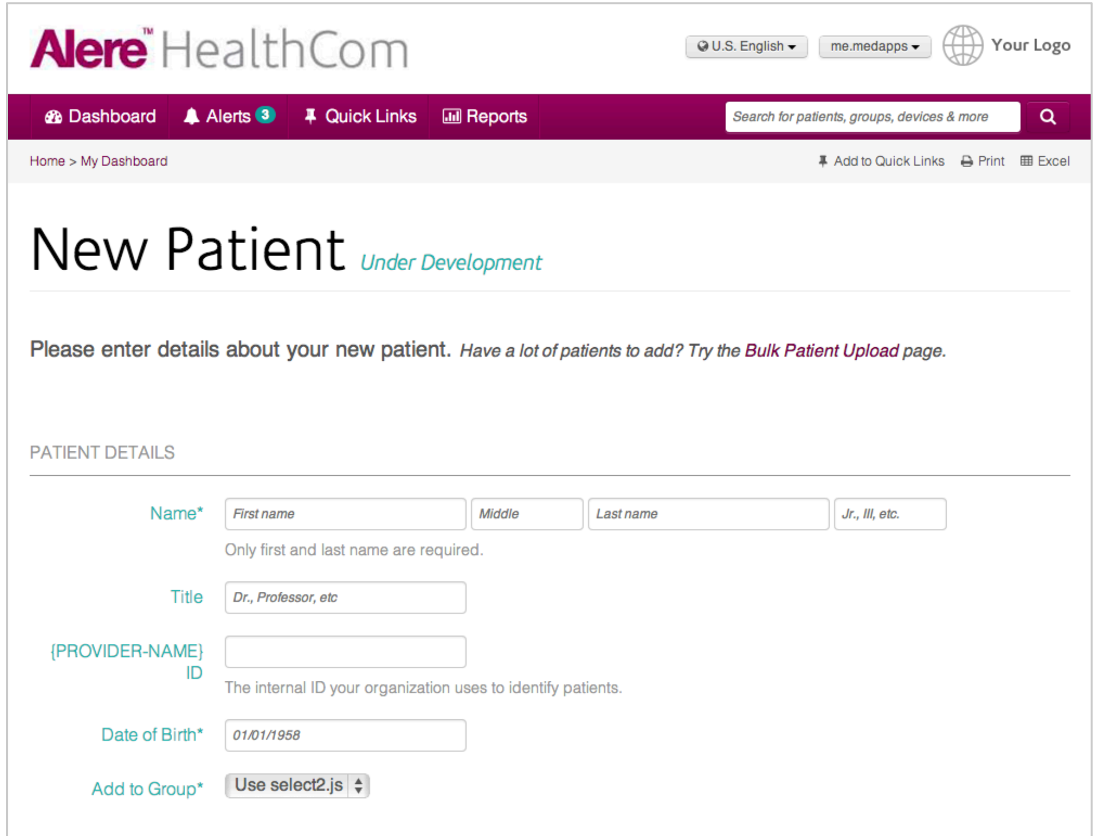
http://hcom-vnextd.medapps.net/Groups/Create

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).
✘ **INCOMPLETE** – Frontend views need to be connected to patient creation functions

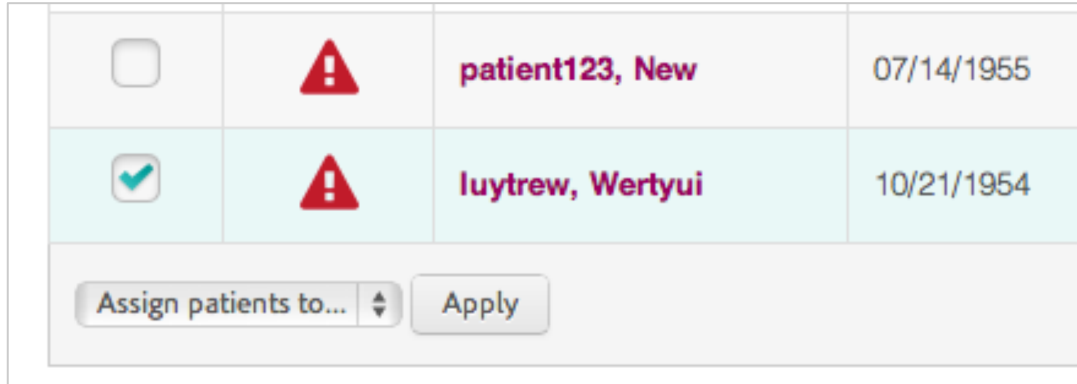
Account Execs are authorized to unassign Patients from "Groups of their Users" or "Individual Nurses".
Account Execs (Professional Admin) ability to opt out of Default assignments.
✘ **INCOMPLETE** – Patient view and profile pages need assignment functionality implemented
Note – Assigning a patient to a single staff member is not directly supported; however, an admin could create a Group with one staff member in it if needed.



http://hcom-vnextd.medapps.net/Groups/Create

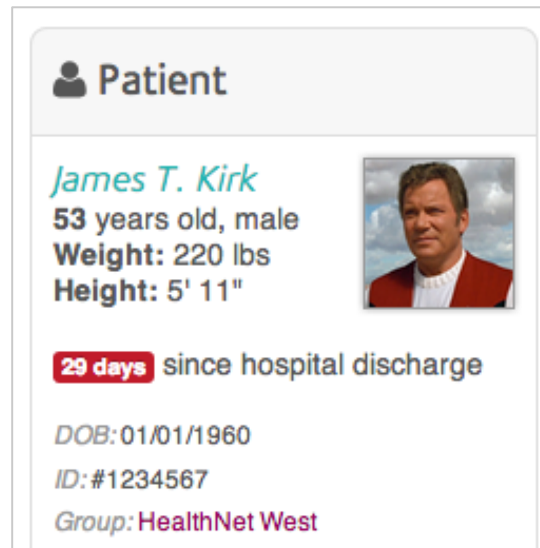
7 Patient/Nurse Assignments, *continued*

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



http://hcom-vnextd.medapps.net/Patients/ViewList

Assignments page: "Search function" - need message or Search functions still available when User clicks on "View Complete List".
✘ **INCOMPLETE** – This functionality is replaced by the Global Search feature and the View Patients search, both of which still need to be implemented.



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

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

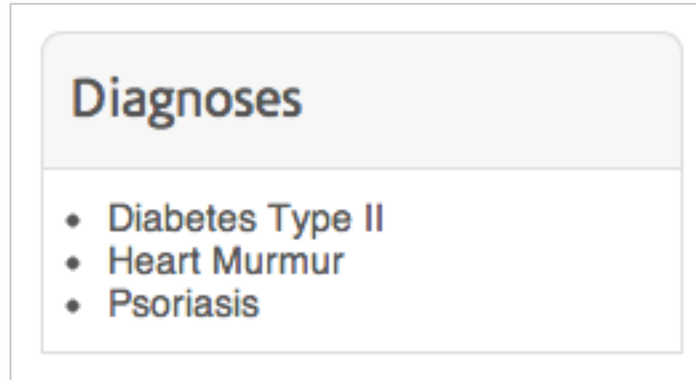
8 Multiple patient conditions

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

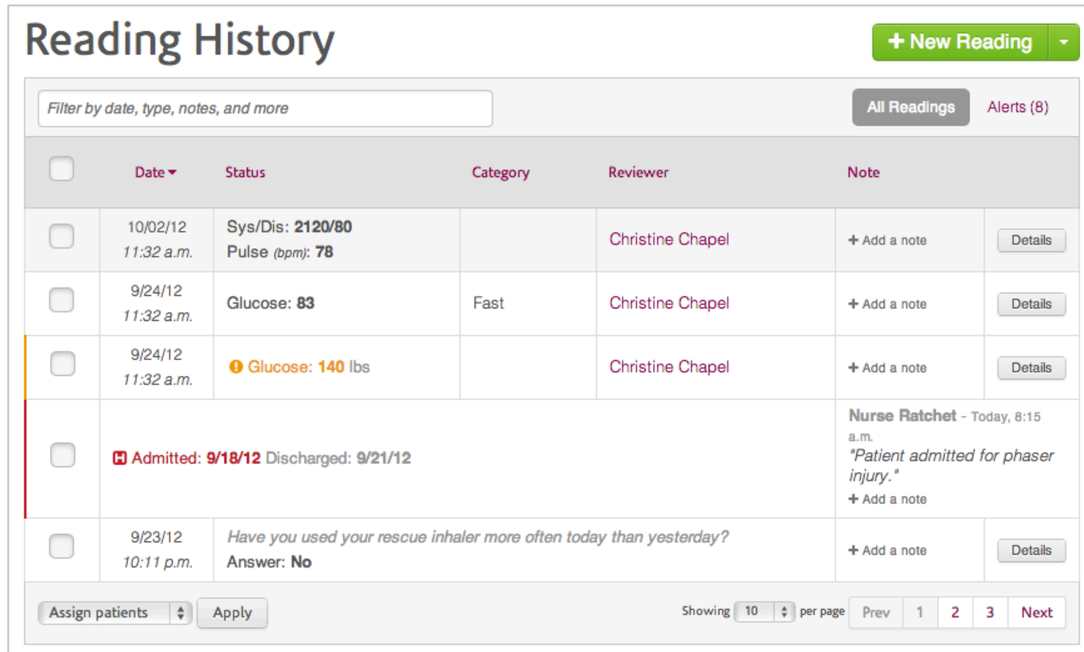


http://hcom-vnextd.medapps.net/Patients/ViewReadings

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.
✘ **INCOMPLETE** – Q&A functionality needs to be built



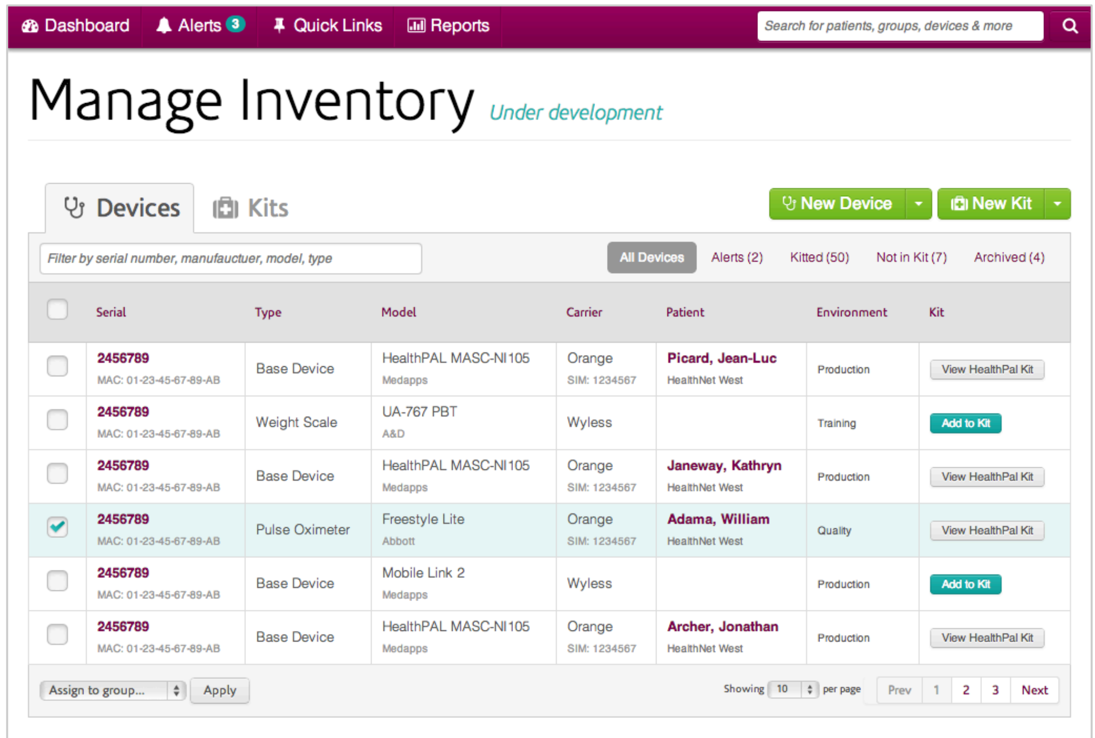
http://hcom-vnextd.medapps.net/Patients/ViewReadings

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.)

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



http://hcom-vnextd.medapps.net/Inventory

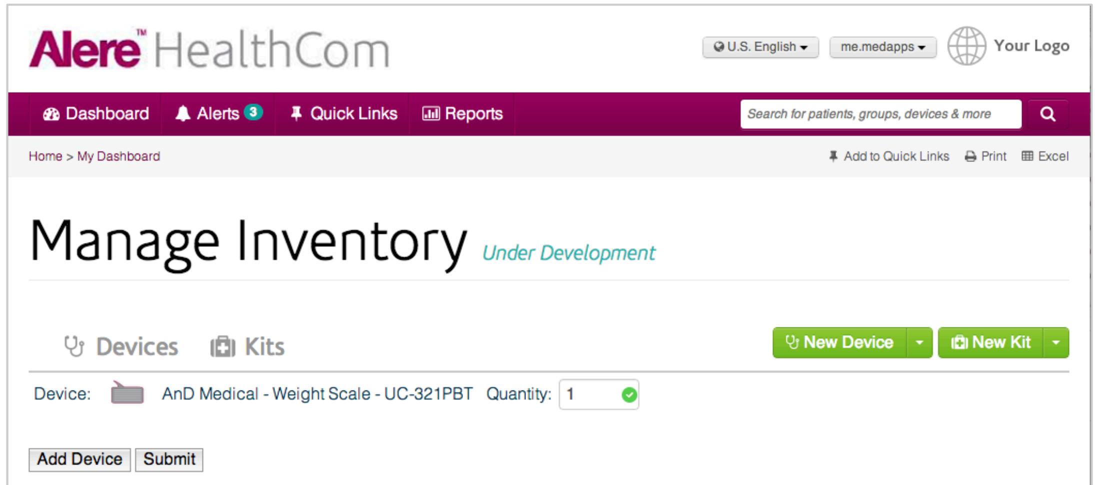
11 Add Device

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

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



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.

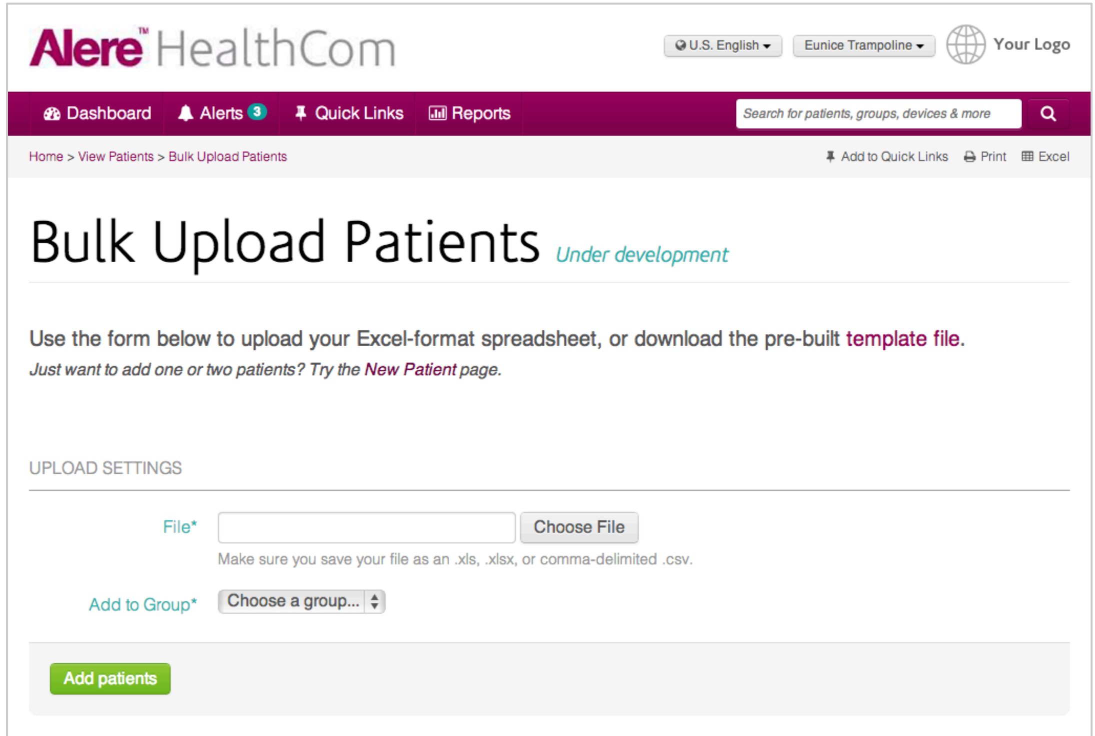
✘ **INCOMPLETE** – Bulk Upload Devices page needs to be created, and functions need to be implemented.

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)

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



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.

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

Setting Thresholds

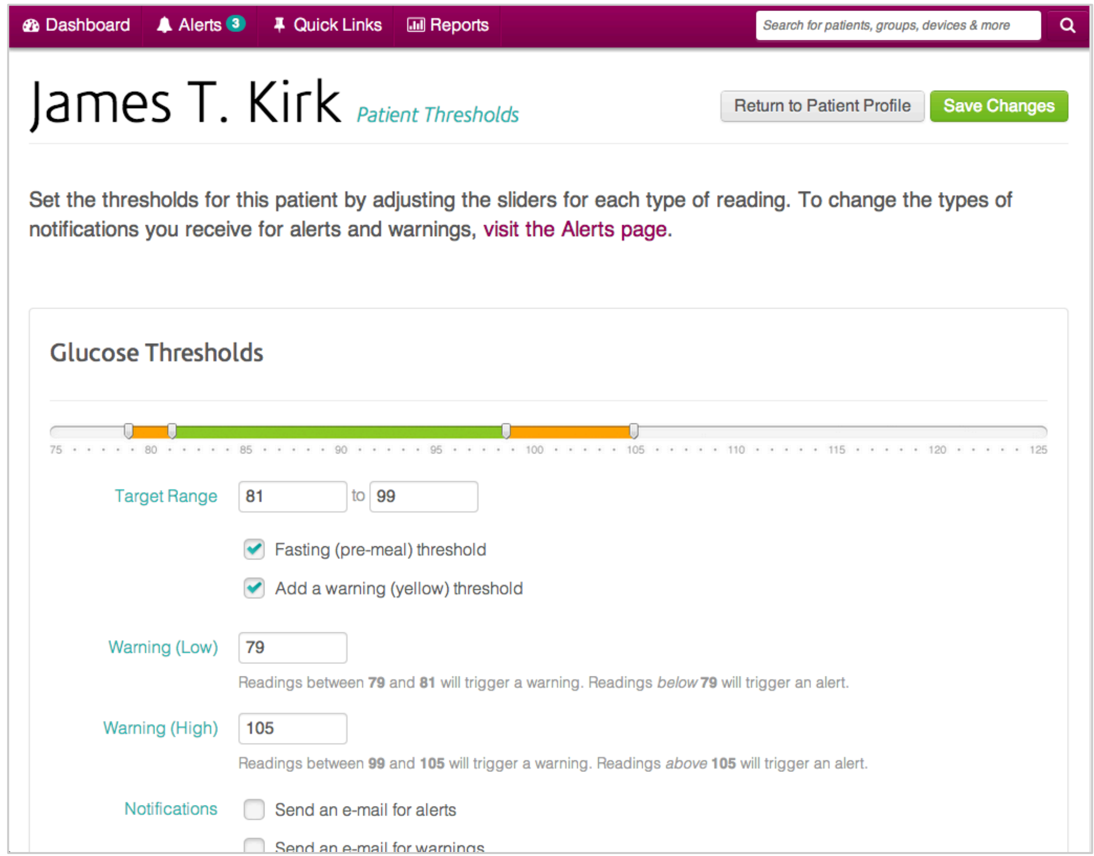
As a Nurse, I need one page for thresholds, so that I can efficiently set all necessary thresholds for a patient all in one screen.

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

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



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

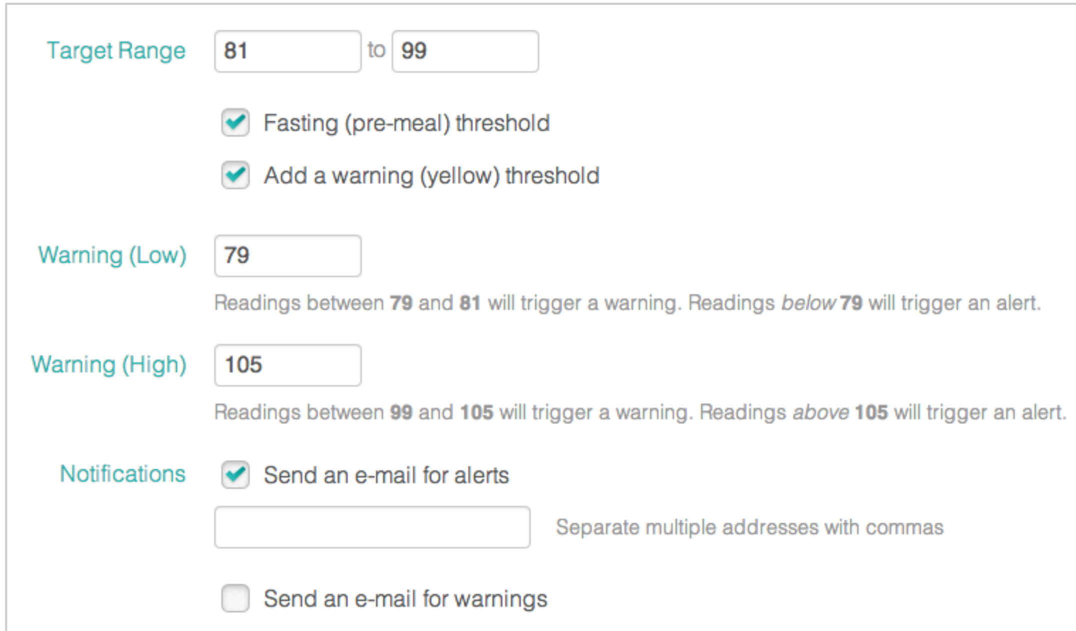
16 Combine Threshold Alerts

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).

✘ **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.



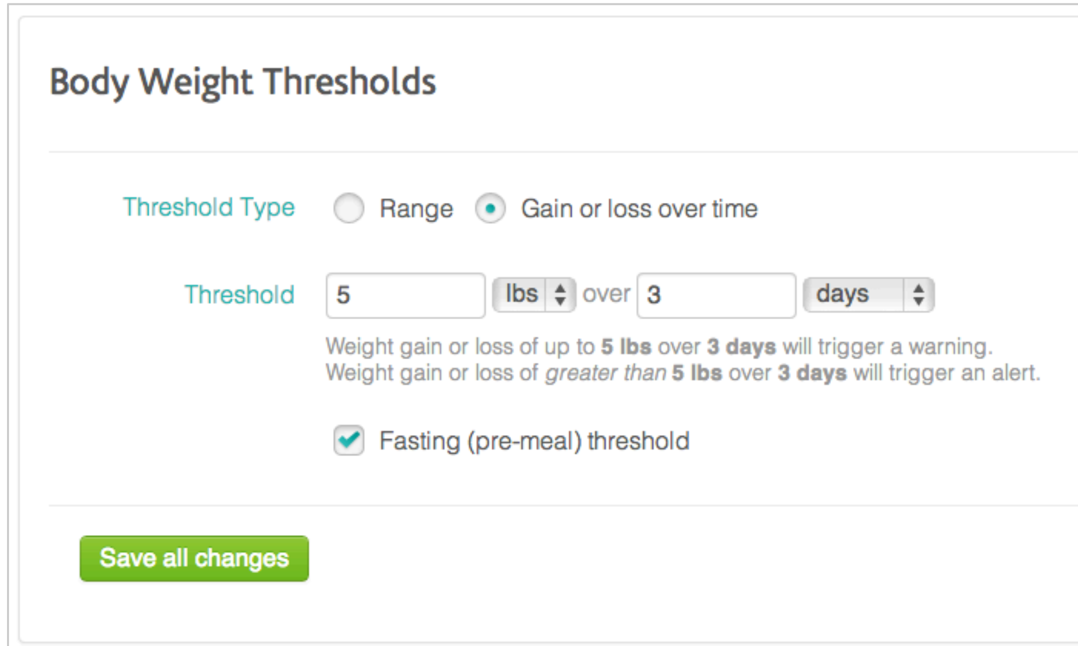
http://hcom-vnextd.medapps.net/Thresholds/Edit

17 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)

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



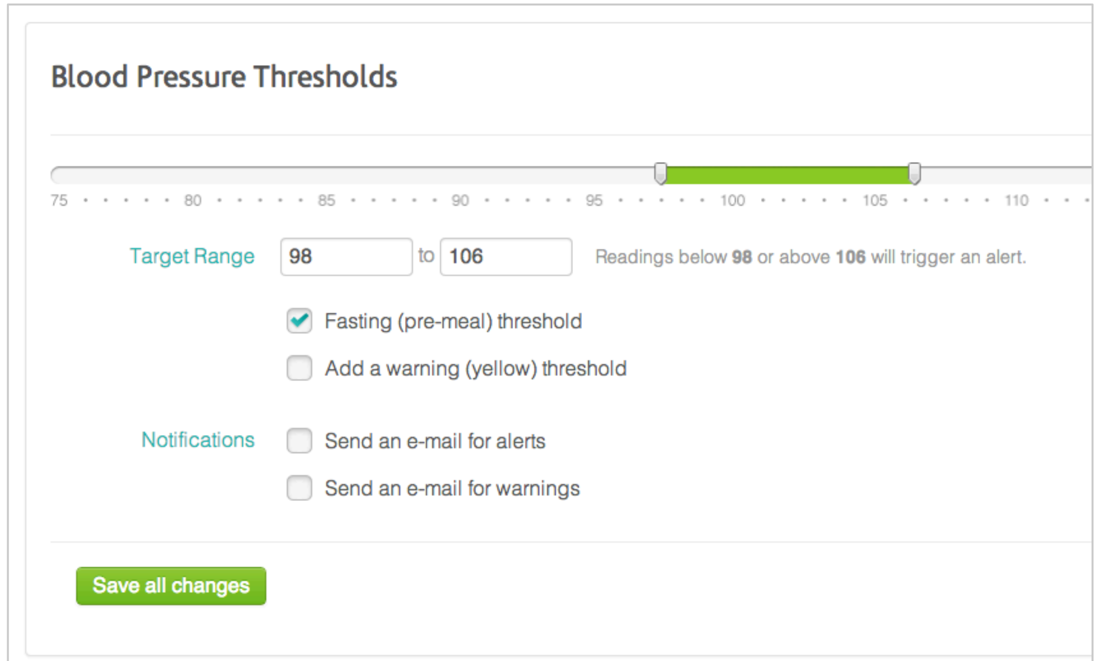
http://hcom-vnextd.medapps.net/Thresholds/Edit

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

✘ **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.



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

Handling Incoming Readings

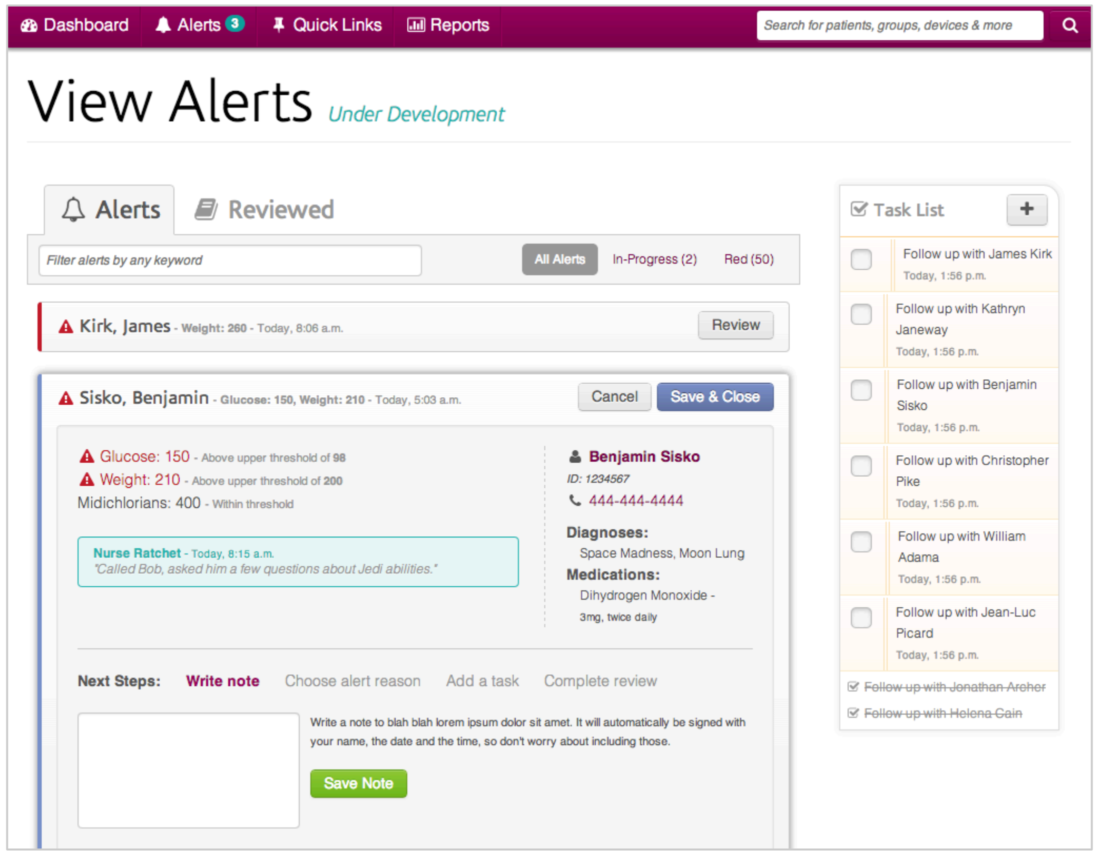
As a Nurse, I need to quickly & easily see the most critical patients and readings first, so that I can address those first to avoid any major issues with patient's condition(s).

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.

✘ 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.

✘ INCOMPLETE – Alert logic not yet implemented



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

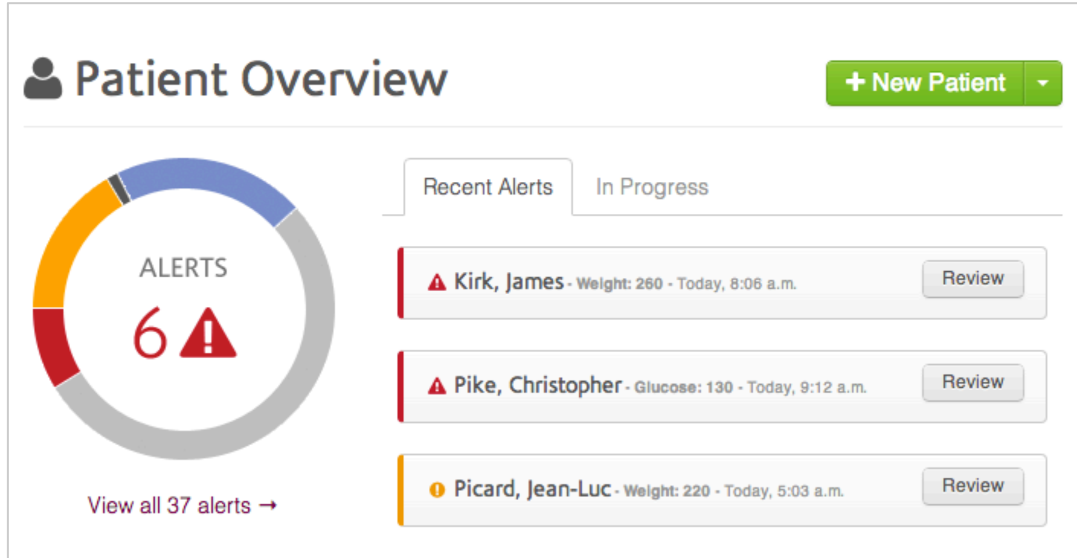
Handling Incoming Readings, *continued*

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).

✘ **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.



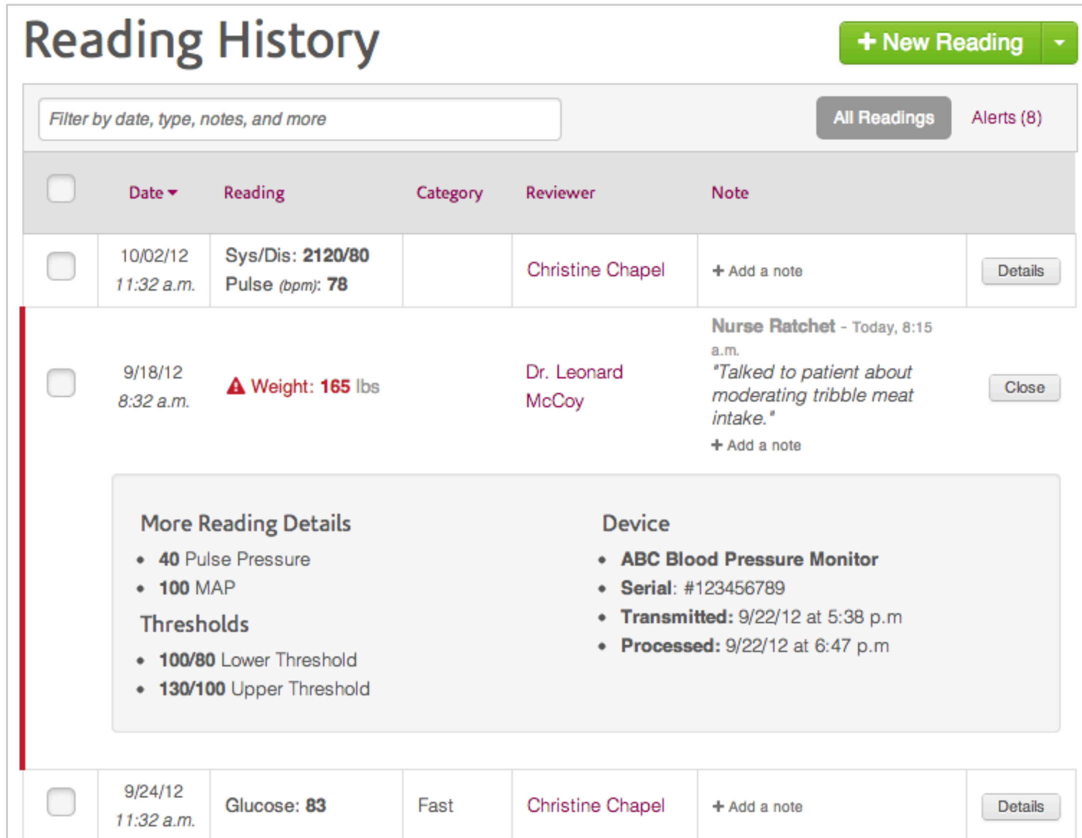
http://hcom-vnextd.medapps.net

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)

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



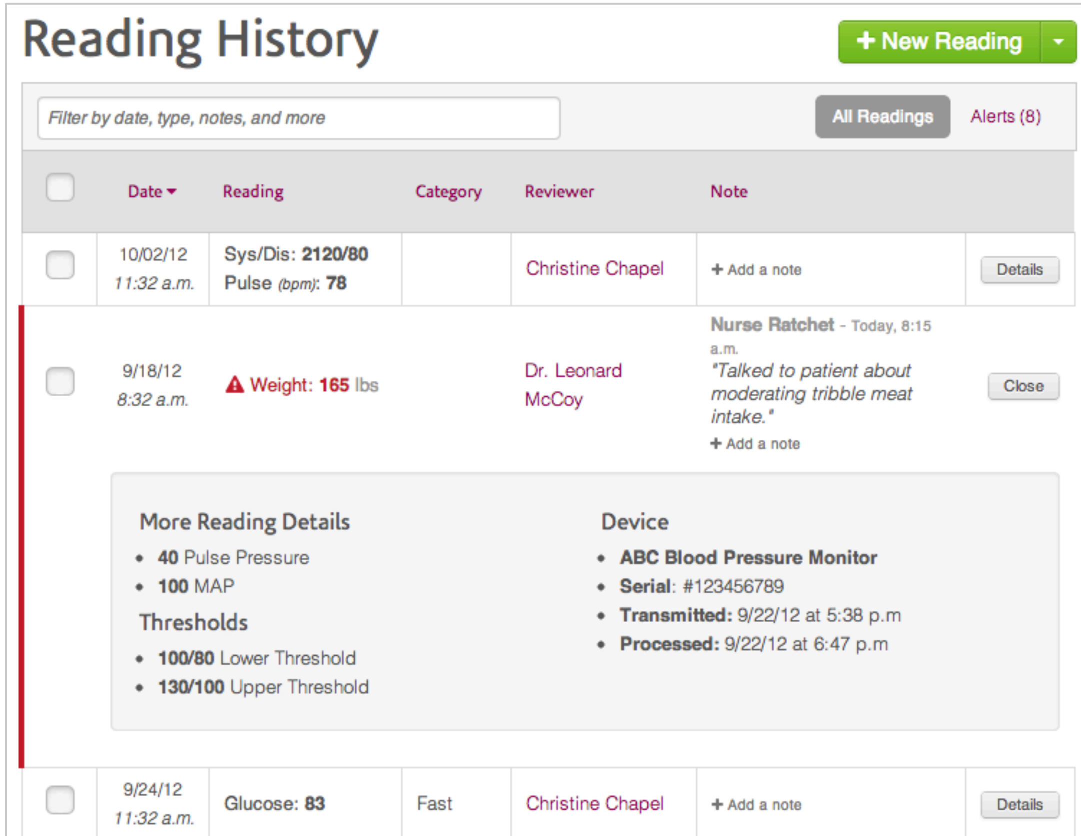
http://hcom-vnextd.medapps.net/Patients/ViewReadings

Personalizable UI

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.
✘ **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.



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

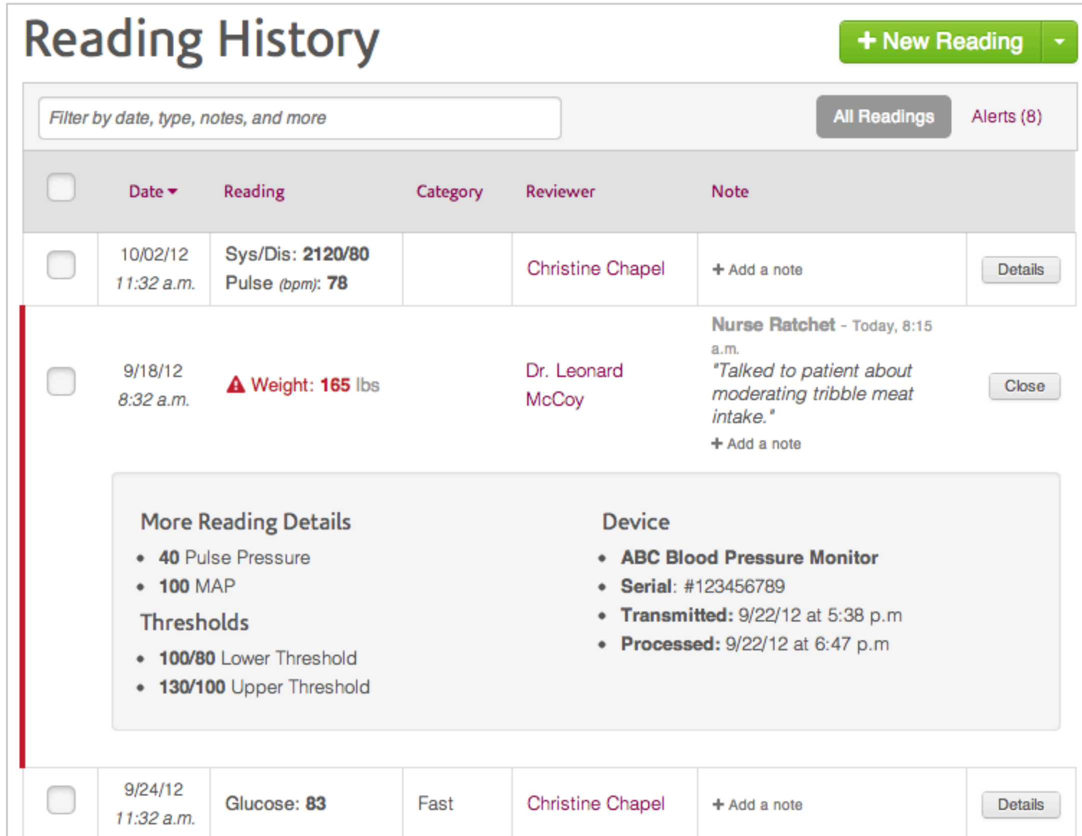
Nurse view of patient readings

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.

✘ **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.



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

23 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.
✘ **INCOMPLETE** – New Reading modal needs to be created, frontend views need to be integrated with data

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

24 Patient Notes

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

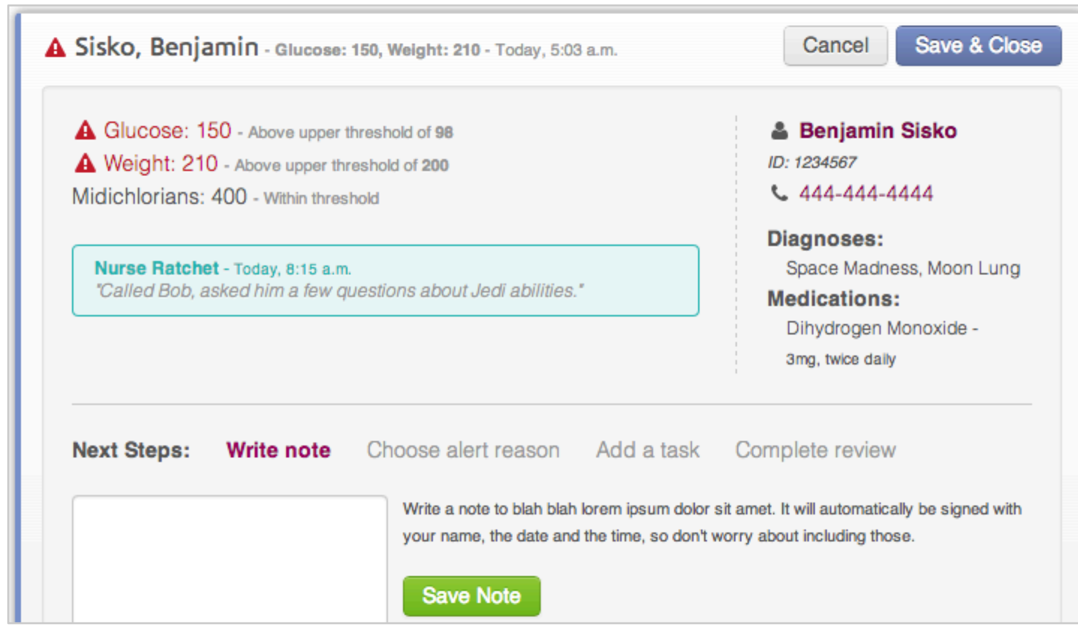
Need to be editable (but only by the highest User Role of the Entity) (need to abide by HIPAA guidelines!)

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 seperate Report (both Reading Notes and Patient Notes).

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



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

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.

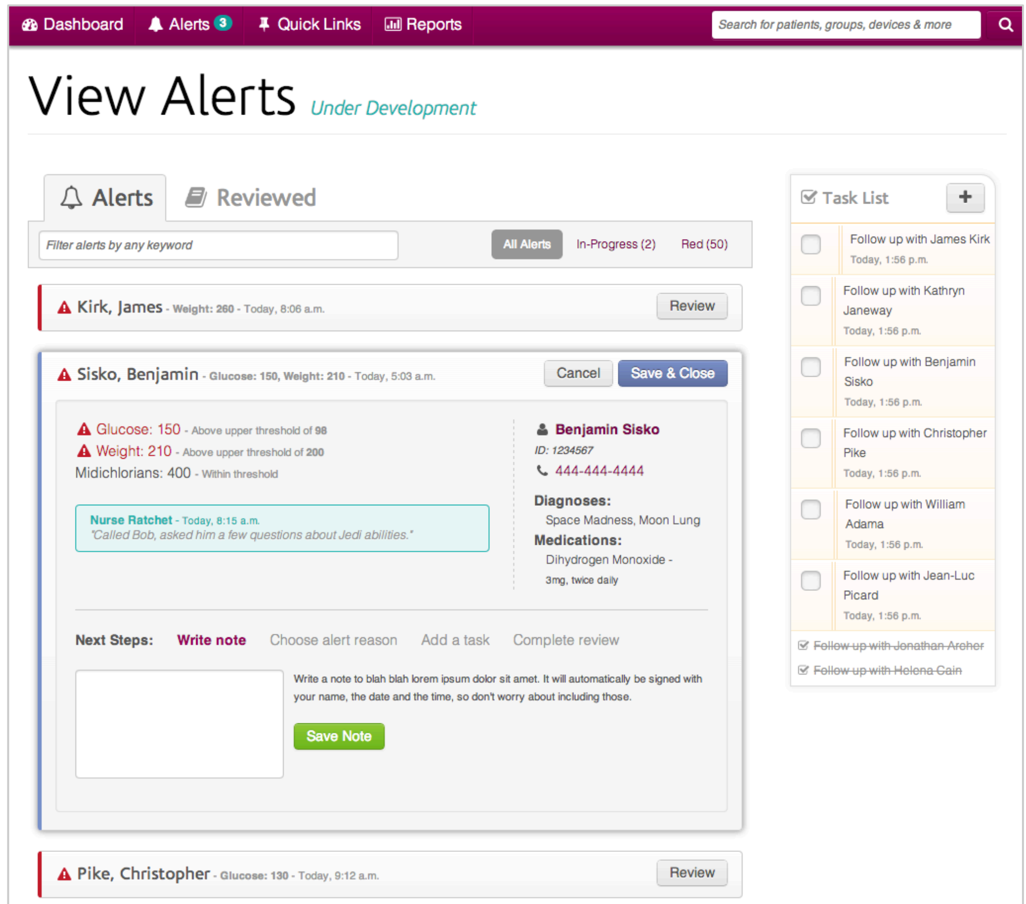
Customers have stated that they need more than either "reviewed" or "not reviewed."

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

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

✘ 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.



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

Nurse 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.

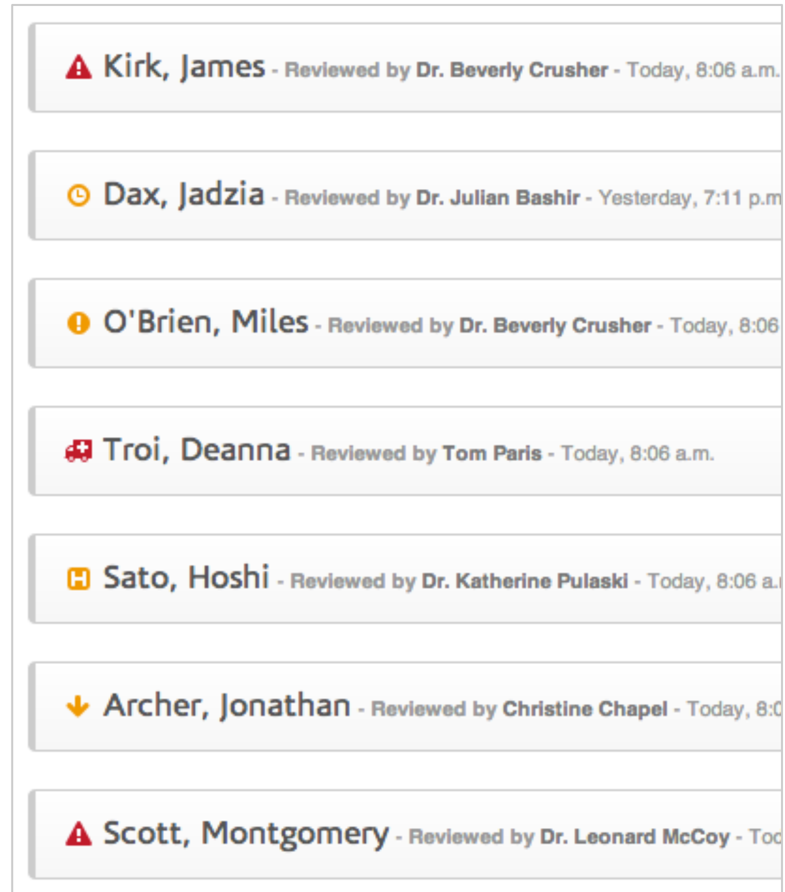
CAUSES for Alerts

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

✘ **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.



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

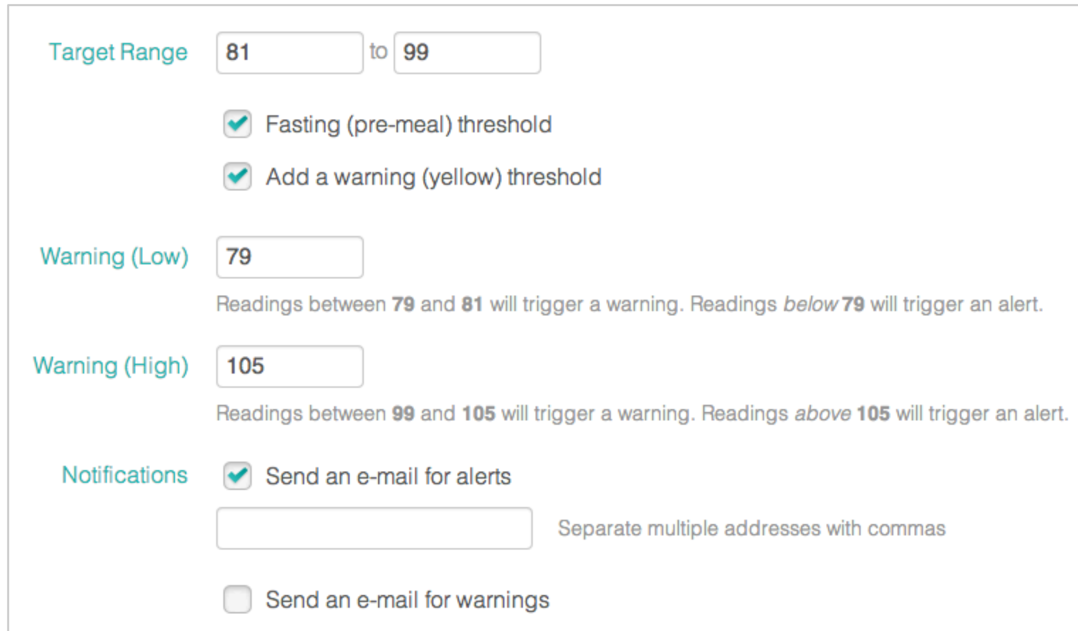
27 Method of Alerts

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

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



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

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

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).

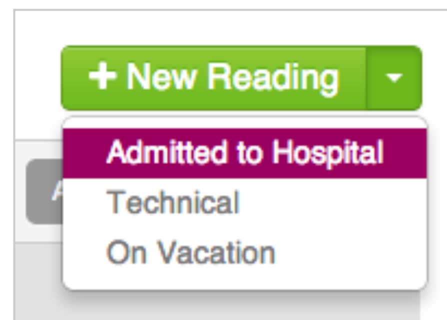
Nurse can click and mark that a patient has been admitted to the hospital.

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 occured. (This is important as Jessica @ Saad pointed out (email 1/18) that a report is given to the doctor now, and

http://hcom-vnextd.medapps.net/Patients/ViewList



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

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."

✘ **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.

✘ **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.

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

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.

✘ **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.

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).

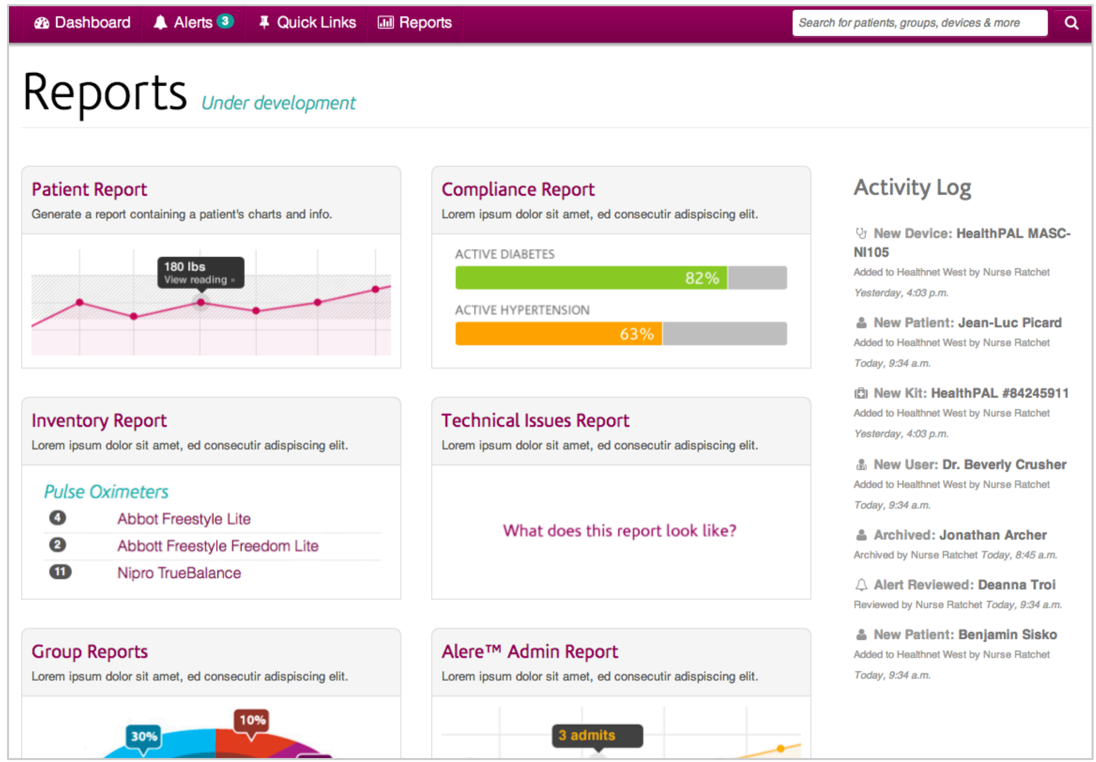
By Disease Type

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:



http://hcom-vnextd.medapps.net/Reports

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?).

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

Interface to Outside Data

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. (Chamelleon, 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 backend system.

✘ **INCOMPLETE** – Status unknown

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

✘ **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, ecrypted 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.

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

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 occured 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

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?).

✘ **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.

✘ **INCOMPLETE** – Status unknown

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, effeciently, 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

DSL Upload, *continued*

DSL?

✘ **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.

✘ **INCOMPLETE** – Status unknown

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)

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

Inventory Reports

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?).

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

Admin Reports

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, 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).

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

45 Data Cleanup

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?

✘ **INCOMPLETE** – Status unknown

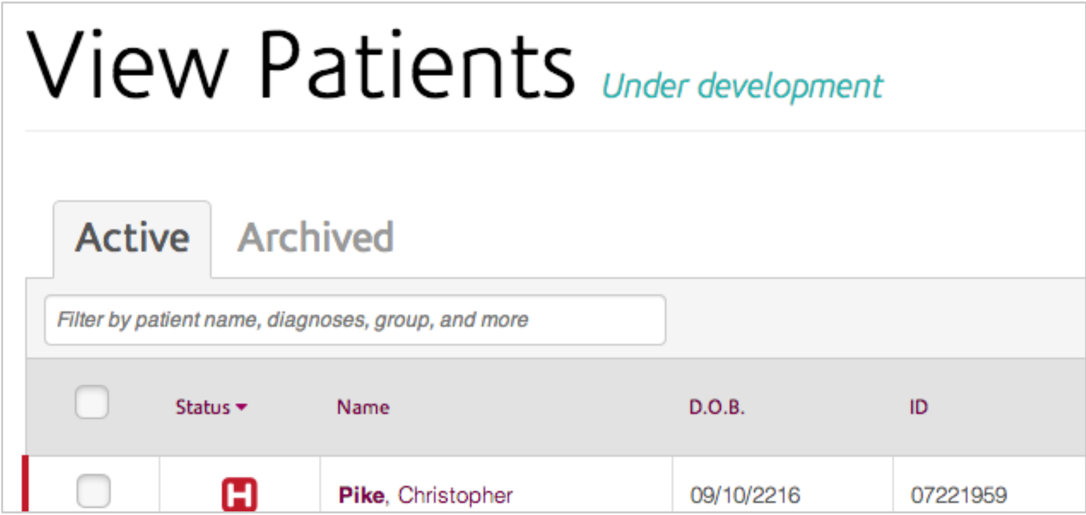
Archiving Old Patients

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").

✘ INCOMPLETE – "Archived" tab available in view, needs to be implemented.



http://hcom-vnextd.medapps.net/Patients/ViewList

Kit List Search

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.

✘ **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.

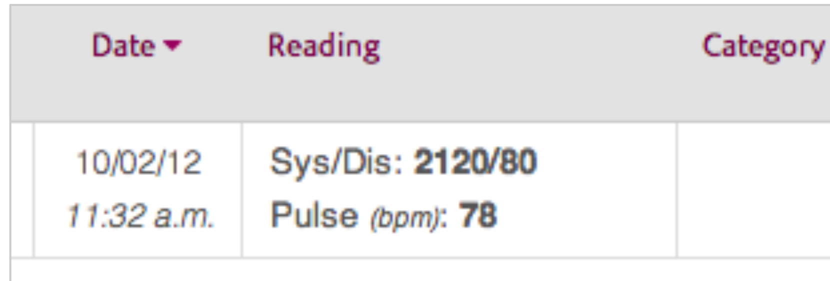
✔ COMPLETE

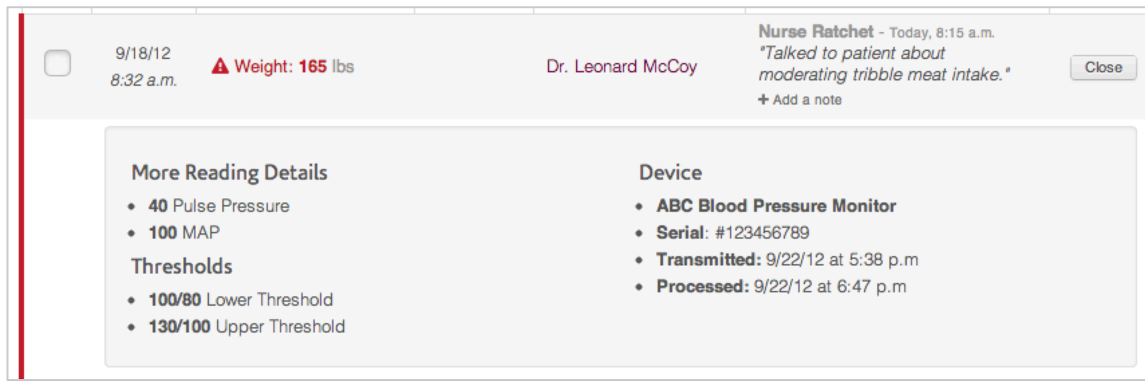
Minimize button-pushing

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

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





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

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 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...)

✘ **INCOMPLETE** – Status unknown

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.

✘ **INCOMPLETE** – Status unkown

Refresh Screen

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.

✘ **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.

Browser Friendly

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

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

HCOM System Capacity

As a Company, we need our systems to be efficient, powerful, flexible, and scalable, so that we can grow effortlessly and accommadate 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

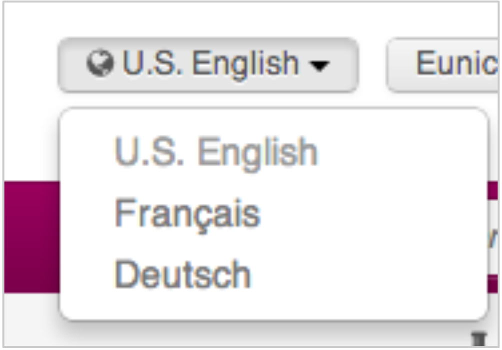
Languages

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 infastructure needs to be put in place now for future languages.

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



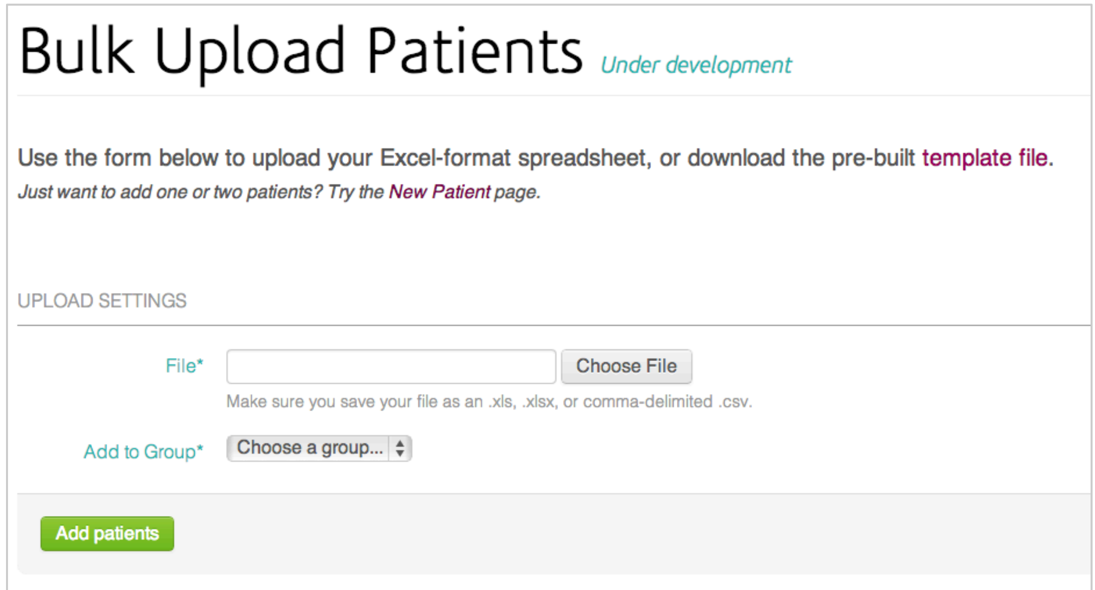
http://hcom-vnextd.medapps.net

Bulk Load

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.

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

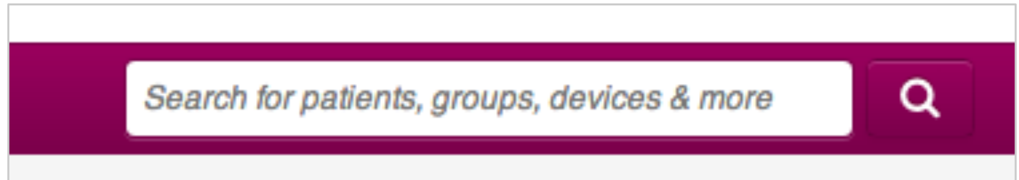


Entity Search

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

✘ **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.

✘ INCOMPLETE – Status unknown

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

✘ 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
2456789 MAC: 01-23-45-67-89-AB	Base Device	HealthPAL MASC-NI105 Medapps	Orange SIM: 1234567

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])

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

Uncluttered UI for Nurses

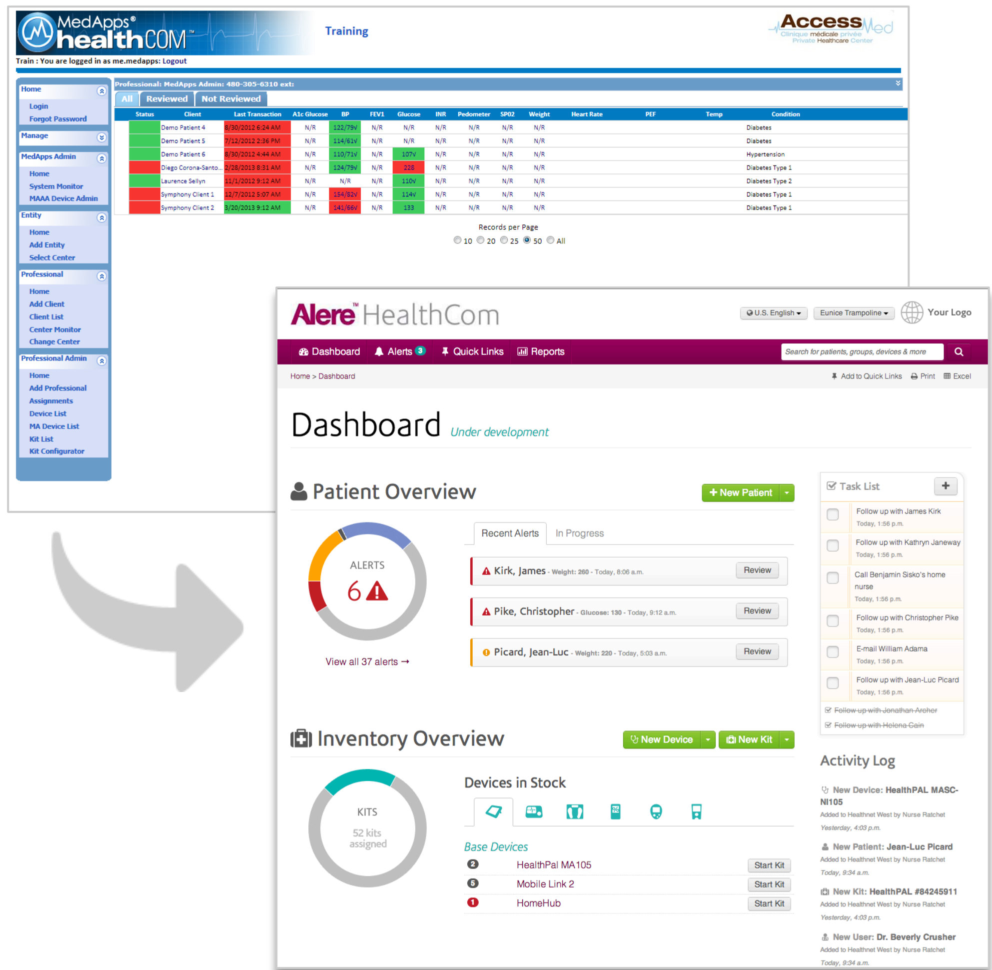
As a Nurse, I need a simple, easy to use UI that is to the point and not full of clutter, so that I don't get distracted and can focus on taking care of my patients.

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")

✘ **INCOMPLETE** – Status unknown

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.

✘ **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"

✘ **INCOMPLETE** – Status unknown

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)

✘ **INCOMPLETE** – Status unknown

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.

✘ **INCOMPLETE** – Status unknown

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)

✘ **INCOMPLETE** – Status unknown

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

✘ **INCOMPLETE** – Status unknown

71 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.

✘ **INCOMPLETE** – Status unknown

Tiers of Service

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.

✘ **INCOMPLETE** – Status unknown