



Veterans Health Administration (VHA)

Mobile Applications Agile Requirements Addendum

Application Owner/Analyst fills out this Addendum

Version Control Version information is required for final SQA testing.

Name of Mobile Application Antibiogram	Name of JIRA Project Antibiogram App	Web address where mobile application can be viewed: [REDACTED]					
Description of Mobile Application Antibiogram is a web application designed to provide VA medical staff easy access to antibiograms (antibiotic resistance data collected from actual in-vitro testing) from any VA facility. The ready availability of antibiogram data through the Antibiogram app should lead to increased utilization of antibiogram data and more effective antibiotic administration.							
Date	RSD/ARD MA Addendum Version	Author	Description of Document Change	Associated BRD Version	Associated Concept/Scope Version	Other Assoc.	Other Assoc.
8/14/2014	1.0	[REDACTED]	First iteration	1.0	2.0.0	1.0	

Application Owner/Analyst/PM Contact Information

Application Owner/Analyst Name/Point of Contact (POC) [REDACTED]	VA E-Mail Address [REDACTED]	Phone Number [REDACTED]
Developer Organization/Company LongView International Technology Solutions Inc.	Contract Start Date October 2013	Contract End Date March 2015
Web and Mobile Solutions PM or POC [REDACTED]	VA E-Mail Address [REDACTED]	Phone Number [REDACTED]
VA Product Development PM or POC [REDACTED]	VA E-Mail Address [REDACTED]	Phone Number N/A

Mobile Application Information

Intended Audience (User) for Mobile Application: <input type="checkbox"/> Veteran <input type="checkbox"/> Caregiver <input checked="" type="checkbox"/> Provider <input type="checkbox"/> Public
Business Needs
Describe and/or model the expected workflow: <ul style="list-style-type: none">• Application works with other VA Application to include appearing on LaunchPad• Providers can view and interpret antibiogram data based on facility<ul style="list-style-type: none">○ Antibiogram data can be filtered by several criteria<ul style="list-style-type: none">▪ Gram stain / species name / organism name▪ Date range of sample data: 12 months / 24 months

- Common / uncommon species
- Hide / show low isolate samples

Describe all Business Needs

Ref. ID	Need	Business Value
1.		
2.		
3.		
4.		
5.		

What laws / regulations cover the implementation of the app? (To ensure compliance)
Standard Veterans Affairs Compliance Policies (i.e. HIPAA)

What is the expected & maximum size of the user base?
Maximum up-to current Provider Populations (maximum capacity sustained by Health Adapter)

Requirements

EPIC ID/Name	FEATURE ID/Name	USER STORY ID/Name	Associated USER STORY Acceptance Criteria
Key	Summary	Description	RTM-Acceptance Criteria
ABA-42	Add Content to the About Page	As a Patient Safety compliance reviewer, I want to ensure the About section of the app contains the necessary context needed for a user to understand the application so that the user is not confused.	<p>User Acceptance Criteria:</p> <p>1.) The following text is contained on the About page</p> <p>Overview</p> <p>This mobile application provides VA medical staff easy access to Antibigram (antibiotic resistance data collected from actual in-vitro testing) from any VA Medical Center (VAMC) facility.</p> <p>Features</p> <ul style="list-style-type: none"> • View the Antibigram(s) for a selected VAMC facility for information to assist with antibiotic selection for specific organisms or groups (Gram).

			<ul style="list-style-type: none"> • Select a duration of 12 or 24 months for the Antibigram data display for a selected VAMC facility. • View a visual indicator anytime the number of isolates is below 30, alerting the user of the limited value of the data. • Access a PDF version of the Complete Antibigram to email or print using capabilities on the user's device. • This Antibigram is best viewed on high resolution devices. <p>Version 2.0</p>
ABA-57	Add Content to the Help Page	As a Patient Safety reviewer, I want to ensure there is a comprehensive Help page so that users understand the context of the app.	<p>1.) The Help page contains SME provided static text:</p> <p>2.) The user can select the hamburger icon to return back to the Antibigram app from the Help page.</p>
ABA-40	Add a Hamburger Icon with the About, Help, Antibigram and LaunchPad Options	As a user, I want to select the hamburger icon to navigate so that I can explore additional features and sections of the application.	<p>1.) The hamburger icon contains the following features/pages:</p> <p>About page Antibigram (return to app/home) Help page Return to Launch Pad</p> <p>2.) The hamburger should include the 'menu' text as shown on the attached screenshot (per usability suggestion).</p>

			3.) The hamburger icon should be displayed on the landing page, as well as the active home/search page
ABA-163	Complete Share Antibigram pdf output	As a PO, I want to ensure the format for the complete Antibigram PDF is displays the appropriate heirarchy of data so I can ensure the users are able to understand the species and isolate rollups.	1.) The PDF data should display the same headers as displayed in the app search results 2.) Legend should be added to each page/table of Share Antibigram pdf
ABA-56	Content on the Landing/Home Page	As a PO, I want to ensure that the landing page reflects the wireframe mock ups, so i can ensure all of the appropriate information is contained.	User Acceptance Criteria: 1.) The following text is contained on the landing page (see attached for content). 2.)The VA logo is placed appropriately on the landing page (see attached). 3.) The search panel is displayed containing the various search features. 4.) Verify the facility in context is accurate based on entered facility. 5.) The "Full Screen" feature is disabled (as no information has been entered)
ABA-166	Displaying Species Rollup in Search Results	As a PO, I want to ensure all of the appropriate data is displayed in the search results so I can ensure the antibiogram data is useful to the SMEs.	1.) All search results display the group, species and/or organism rollups, number of isolates, and antibiotics (see screen shot for table layout).
ABA-31	Expressing Antibiotic Susceptibility as Percentage and Ratio	As a VA Provider, I want to be able to see the number of susceptible isolates (the percentage numerator) and total number of tested isolates (the percentage denominator) for a given bacteria and antibiotic treatment so I can understand the validity of the ratio.	1.) User can select feature on the search panel to view search results in terms of percentage or rate. 2.) Ratio and percentage are calculated as: # of susceptible isolates/total number of tested isolates See attached for visual representation. 3) Table updates when facility is changed
ABA-223	Facility Search from CDW	As a user I want to change the way the app is	1.) Return data from CDW matches current data

		currently pulling the facility code from HA to CDW So that the app is faster and more reliable.	
ABA-36	Filter Low Isolate Data for 12 and 24 Months	As a VA Provider, I want to be able to hide low isolate data if it is not meaningful for my search and analysis over a period of 12 and 24 months.	1.) Users can select an option on the search panel to display or suppress low isolate results (organisms with less than 30 isolates) 2.) Users can select to view results based on the past 12 or 24 months. Option will default to 12 months.
ABA-154	Include Last Updated On Feature	As a PO, I need to incorporate a feature that allows the user to know when the application was last updated so that I can make sure the app passes compliance reviews.	1). The Last Updated On date is displayed every time the application is refreshed.
ABA-33	Search Feature 1: Directly Type in or Drill Down to select Organism, Species, Group Name	As a VA Provider, I want to be able to use an interactive search panel to display data by isolate group, species, and/or organisms so I can ensure I am able to view the slice of data most meaningful to me.	1.) Users can directly type in the name of the organism, species, or isolate group in the left hand search window to view respective results. 2.) The name of the organism, species, or isolate will auto-populate matching results and the respective hierarchical data allowing the user to drill-down to the level of detail needed. 3.) Search results should be displayed as a ratio or as a percentage, depending on which (respective) option is selected in the search panel. 4.) Search results display the group, species and/or organism rollups, number of isolates, and antibiotics (see screen shot for table layout). 5.) Standard key/legend should be displayed in the bottom left hand corner of the active search results page. 6.) Search panel can be hidden so the user can view the full screen.
ABA-34	Search Feature 2: Search by Gram Positive or Gram	As a VA Provider, I want to use an interactive search panel to display rollups of Gram Positive or Gram Negative so I can	Search Filters: 1.) Users can search by Gram Positive or Gram

	Negative (or subsets)	ensure I am able to view the slice of data most meaningful to me.	<p>Negative to see Antibigram data by Gram Positive or Gram Negative.</p> <p>2.) Users can filter further by Gram Positive Cocci or Gram Positive Rods (as a subset of Gram Positive), and Gram Negative Cocci and Gram Negative Rods (as a subset of Gram Negative) to see Antibigram rollups.</p> <p>Search Results:</p> <p>3.) Search results should be displayed as a ratio or as a percentage, depending on which (respective) option is selected in the search panel.</p> <p>4.) Search panel can be hidden so the user can view the full screen.</p>
ABA-37	Selecting a Default Facility from Landing Page	As a VA Provider, I would like to be able to select a default facility so that I do not have to search for my home location every time I launch the application.	<p>1.) The user is prompted with an option to enter a facility from the landing page. Once the location has been selected, the user is prompted with a question to make the selected facility their default location.</p> <p>2.) If the user confirms the location as their default location, the location should be embedded in the header (top left hand corner) of the active page to persist throughout the application.</p> <p>3.) If the default facility option is not enabled, the facility will not remain in context if the application is refreshed.</p> <p>4.) Entered text should prompt auto-complete of facility.</p> <p>Usability note: Ensure that users will never have to delete the placeholder text manually before entering their own. Consider writing tip out and placing below label to avoid placeholder text problems.</p>
ABA-39	Sharing Antibigram Data	As a VA provider, I need to be able to PDF and email the facility Antibigram	<p>1.) User can use the inherent features on his or her local device to open, share, email or print the</p>

		information so that I can share any trends or distinguishing data with colleagues.	Antibiogram PDF.
ABA-153	Update Front-End to Reflect New Wireframes	As a UI/UX expert, I need to incorporate feedback and suggestions from the patient safety and usability compliance bodies, so the app can pass the final V&V, compliance, and SQA reviews.	<ol style="list-style-type: none"> 1.) Change search features to separate tabs 2.) Complete PDF -Visually indicate low isolate data cells (* and gray italicized) 3.) Rename filter to "Hide Uncommon Species" 4.) Rename filter to "Ratio of susceptible to number tested" 5.) Rename data table to "Antibiotics (Percent Susceptible)" and "Antibiotics (Ratio of Susceptible to Number Tested)" 6.) Show Low Isolate as a default view 7.) All filters in bottom left column under a 'Filters' header
ABA-162	View Legend in Data Table	As a PO, I need to ensure the user is able to view a legend so that they are able to interpret the data appropriately.	<ol style="list-style-type: none"> 1.) Standard key/legend should be displayed in the bottom left hand corner of the active search results page. 2.) Move legend to just below the table
ABA-149	Add 'x' to search boxes	As a PO, I need to ensure the user is able to clear input entered into the 3 application text boxes	3 search functions: Search Facility (landing page), Change Facility (header), and Organism Search
ABA-156	Create an Adaptive Design for the Display Results on Phone	As a PO, I need to ensure the antibiogram application is functional on a phone so that primary users are able to access the application using their personal phones.	<ol style="list-style-type: none"> 1.) User should see version number (2.0.0) in the footer of the app. 2.) User should be able to select the hamburger to navigate to the About, Help, and Launchpad. 3.) User should be able to select and change default facility to see updated results. 4.) User should be able to toggle between Ratio and Percent filters to see updated results. 5.) Organism results should be displayed in the rows, and Antibiotics in the column, both alphabetically. Organism names can be wrapped if necessary. 6.) Legend is frozen at the bottom of the screen pane and should always remain visible. 7.) Antibiogram rows and columns should remain in a fixed pane so users can scroll to the right and still see the organism/antibiotic name. 8.) Data table should reflect same formatting as legend. 9.) User should be able to navigate through the data

			displayed.
ABA-164	Create a EULA page for HTML Version	As a legal rep of the VA I want the user to confirm that the understand the legal implications of using the app so that the VA has is not legally liable for software misuse	<p>User is prompted to accept again if the EULA has changed The user will have to sign a web app EULA for each device/browser combo used User cannot use app and is returned to launchpad if EULA is declined</p> <p>• Note: EULA text is standard</p> <p>Dev Note: This is a standard pattern and standard test for Veteran/Patient apps. Include standard test link.</p>
ABA-165	Create EULA for Adaptive Phone Design	As a legal rep of the VA I want the phone user to confirm that the understand the legal implications of using the app so that the VA has is not legally liable for software misuse	<p>Upon using the app for the first time, the user will need to accept a EULA User will not have to update the EULA for a web app unless the current EULA is newer than the date signed The user will have to sign a web app EULA for each device/browser combo used On a hybrid app the EULA must be presented and accepted for each new downloaded version</p> <p>• Note: EULA text is standard</p> <p>Dev Note: This is a standard pattern and standard test for Veteran/Patient apps. Include standard test link.</p>
ABA-224	Modify Autocomplete to include group strains	As a user i want to have the ability to also search for groups.	User can directly search by fixed buckets of Gram Positive Rods, Gram Positive Cocci, Gram Negative Rods, Gram Negative Cocci and see applicable antibiogram data in search results.
ABA-216	Modify Search and Display Results	As a PO I need to change the search feature so that it allows the user to pull only the specified data.	1.) User can view search results based on fixed buckets of Gram Positive Rods, Gram Positive Cocci, Gram Negative Rods, Gram Negative Cocci
ABA-168	Tour of the App and User guide	As a usability compliance body I want to ensure the user understands how to filter the data so that I can ensure the app is usable by all users regardless of their experience with antibiogram data.	<p>1.) User prompted with Tour of the App content when first logged in after the accepting the EULA agreement</p> <p>2.) User can access the Tour of the App link from the Help page after logged in.</p> <p>3.) User can access the documents using the embedded links within the Tour of the App page</p>

			<p>4.) User is taken to the landing page upon confirming the content</p> <p>5.) User can select an option if it is a shared workstation</p>
ABA-211	Tour of the App Page on Phone	<p>As a usability compliance body</p> <p>I want to ensure the mobile phone user understands how to filter the data so that I can ensure the app is usable by all users regardless of their experience with antibiogram data.</p>	<p>1.) User prompted with Tour of the App content when first logged in</p> <p>2.) User can access the Tour of the App link from the Help page after logged in.</p> <p>3.) User can access the documents using the embedded links within the Tour of the App page</p> <p>4.) User is taken to the landing page upon confirming the content</p> <p>5.) User can select an option if it is a shared workstation</p>
ABA-290	Update Error Messages For Antibiogram to Official Verbiage	<p>As a Product Owner</p> <p>I want to make changes to the front end display</p> <p>So that it matches what is desirable by the SMEs</p>	<p>1.) "Hide Uncommon Species" filter is changed to "Show Only Common Species" on both phone and web versions.</p> <p>2.) Make all links within the Visual Help page (Tour of the App) clickable.</p> <p>3.) Generate Antibiogram button on phone can only be clickable when organism, species, or gram stain is selected.</p> <p>4.) LaunchPad is the only available functionality in the menu until both the EULA and Tour of the App terms are accepted by user.</p> <p>5.) Once user has accepted EULA and Tour of the App for the first time, the user will not see the 'Continue to Anitbiogram' nor 'Do Not Share This Tutorial Again' option at the bottom of the page when selecting Tour of the App from the menu.</p> <p>6.) Gram buckets are ordered 'Gram Positive Cocci, Gram Negative Rods, Gram Negative Cocci, Gram Negative Rods'</p> <p>7.) Update Error Message content.</p>

ABA-334	Display Data as Whole Numbers	As a Provider I want to view whole numbers in the data So I understand that the data is a percentage.	1.) All data displayed under percentages should be rounded to the nearest whole.
ABA-335	Change Font on Visual Help Page	As a Product Owner I want to ensure all fonts are consistent within the visual help page so that the visual help content passes usability.	1.) Change font so that only the main title and titles of the two sections are in Georgia. 2.) All other text should be Arial.
ABA-336	Left Justify the Legend	As a Product Owner, I want to ensure the legend is left justified So that it meets usability standards.	1.) The legend is left justified on both the web and phone versions.
ABA-325	display search by name list by Rank/Occurrence	As a Provider I want to see my search results displayed by rank So I can quickly choose the data I am looking for.	1.) User can see the top 5 results based on Rank/Occurrence when searching for the entered organism or species. 2.) User sees "There are too many results. Add more letters to refine your search."
ABA-380	Calculation Algorithm - Roll low isolate, # of Isolates, Specie sumup	As a Provider I want to calculate antibiogram data So that the data is meaningful to me.	1.) Low isolate data is included in species level calculation across the board. 2.) Total number of isolates for a species is calculated using Dr. Jones scripts 3.) Number of isolates column for a particular organism is calculated using Dr. Jones scripts
ABA-337	Add Common Species Exceptions	As a Provider I want to keep certain organisms outside of the species roll-up So I can quickly see their individual antibiogram data.	1.) If "Show Only Common Species" filter is checked, the following organisms should be displayed under their parent species: MRSA, MSSA, and Lugudenensis. 2.) Species level calculation will be the same and should include rollup data.
ABA-415	Updates to Error Message Verbiage	As a Provider I want to ensure the error message is descriptive So that the user understands why there is an error.	The following changes need to be made to the error messages in the app: 1. Error message is generated if there is no data is found for the Gram Stain, Species, or Organism selected for the facility in context "Error: No antibiogram data for the filters and facility selected. Please revise your search" 2. Error message is generated there isn't a facility that matches the letters/name entered in facility

			<p>search.</p> <p>“Error: No facility found that matches the name entered. Please revise your search.”</p> <p>3. Error message is generated if while loading an antibiogram or searching for a facility/organism, the search request happens to take more than 30 seconds. Spinner is displayed after 4 seconds, then error after 30:</p> <p>“Error: Connection time out. Please try again.”</p>
ABA-114	Changing Default Facility	As a user, I want to be able to change my (default) facility so I can see Antibiogram data for a different facility.	<p>User Acceptance Criteria:</p> <p>1.) User can click on the embedded default facility (after one has been selected) and be prompted to enter a new facility.</p> <p>2.) The new facility remains in context after selected until manually changed again.</p> <p>3.) The antibiogram table reflects the data from the updated facility.</p>
ABA-155	Creating Adaptive Design for Search Page on Phone	As a PO, I need to ensure that the application is functional on a phone so that users are able to access the app using their personal phones.	<p>1.) User can filter by 12 and 24 months.</p> <p>2.) User can hide low isolate data.</p> <p>3.) User can populate table results by entering name of isolate group, species, or organism in the search field.</p> <p>4.) User can change and select a new default facility and see updated results.</p> <p>5.) User can see the Last Updated field displaying the date that the app was last refreshed.</p> <p>6.) User can access link to launch the full Antibiogram 2.0 HTML5 app.</p> <p>7.) User can select the PDF and will be able to use whatever features are inherent on the device being used to open or share the antibiogram data.</p> <p>8.) User can select the hamburger from the upper left hand corner to navigate to the Tour of the App page, About page, the Help page, and Launchpad.</p> <p>Adaptive design should reflect the following wireframe functionality:</p>

			http://1d0k2s.axshare.com/#p=phone_home
ABA-157	Run the Fortify Scan and Complete Document	As a PO, I need to ensure the fortify scan has been completed and remediated, as well as all associated documentation, so I can ensure the app is in compliance with the PMAS documentation.	1.) The fortify scan has been completed and remediated on the most recent artifact. 2.) Fortify scan intake page/form has been completed and loaded on the SharePoint.
ABA-158	Keeping User Informed of Status of the App	As a PO, I need to ensure that the user is aware that the data does not have data to display based on search results or load time so they are not confused.	1.) If the application takes longer than 4 seconds to load, a spinner must be displayed indicating the table is still loading. 2.) Users must be informed when no data is available (either based on a filter)
ABA-212	Update Help Page with Technical Contact Information	As a PO, I need to make sure contact information is displayed on the Help page so that users are able to report issues or provide feedback.	1.) User can see contact information on the Help page.
ABA-215	Document AB 2.0 Script Process	As a developer I need to document test scripts So that future developers are aware of how the data is generated	1.) Document of the comprehensive script process is saved on SharePoint
ABA-288	Change Group, Species and Organisms to pull real data	As a VA provider, I want to do a search based on preferred names and facility selected so that I can see real data as reflected in CDW.	1.) User is able to search based on preferred name of organism and/or species and see updated results based on facility in context. 2.) User is able to see accurate auto-complete names of organisms, species, and gram stain. 3.) From the search tab (not gram buckets search panel), user can type in the preferred name of any organism and see any organism data within the dataset given, even if species level is 'NULL' 4) Total Number of Isolate calculation for species level is updated. 5.) Species level calculation does not include low isolate data.
ABA-289	Incorporate Hierarchical Structure	As a VA provider I want the preferred organism and species names to be displayed based on the SNOMED heirarchy So that I can see all organism roll-up data for a particular species.	1.) The user is able to see accurate hierarchical structure for the facility selected. 2.) Organism and species names are displayed as the preferred SNOMED names
ABA-291	LaunchPad	As a VA Provider, I want to be able to access this application	1.) The app is accessible from LaunchPad 2.) LaunchPad can be reached from within the app

		from LaunchPad So that it is convenient to me when accessing other applications.	using the header menu
ABA-292	Update Visual Help	1.) Visual Help file reflects updated UI changes and functionality.	Make updates to tour page on both regular and phone versions based on new wireframes
ABA-325	display search by name list by Rank/Occurrence	As a Provider I want to see my search results displayed by rank So I can quickly choose the data I am looking for.	User Acceptance Criteria: 1.) User can see the top 5 results based on Rank/Occurrence when searching for the entered organism or species. 2.) User sees "There are too many results. Add more letters to refine your search."
ABA-320	Test the validity of the Antibigram Data and Calculations	As a tester I need to ensure the functionality of Antibigram 2.0 So that I can verify that all of the data seen by the end user is reflecting accurately as it is stored in production CDW.	1.) Verify the accuracy of the hierarchy structure. 2.) Verify the validity and accuracy of the hierarchy aggregate (species) calculation. 3.) Verify the accuracy of excluding low isolate data. 4.) Verify the accuracy of the common species filter and calculation.
ABA-329	Include User Guide Content	As a PO I need to create a user guide to be linked within the application So the user is able to leverage the user guide whenever necessary.	1.) User Guide content is included in the User Guide template that can be launched from within the Tour of the App and from the About page.
ABA-33	Search Feature 1: Directly Type in or Drill Down to select Organism, Species, Group Name	As a VA Provider, I want to be able to use an interactive search panel to display data by isolate group, species, and/or organisms so I can ensure I am able to view the slice of data most meaningful to me.	1.) Users can directly type in the name of the organism, species, or isolate group in the left hand search window to view respective results. 2.) The name of the organism, species, or isolate will auto-populate matching results and the respective hierarchical data allowing the user to drill-down to the level of detail needed. 3.) Search results should be displayed as a ratio or as a percentage, depending on which (respective) option is selected in the search panel. 4.) Search results display the group, species and/or organism rollups, number of isolates, and antibiotics (see screen shot for table layout). 5.) Standard key/legend should be displayed in the bottom left hand corner of the active search results page. 6.) Search panel can be hidden so the user can view the full screen.

ABA-32	Develop all Required PMAS Documentation	As a QVE Reviewer, I need to ensure all PMAS documentation has been completed as part of Antibioqram 2.0 development so I can verify that it meets all VA requirements.	1.) Concept Paper - PO 2.) User Guide - PO 3.) Privacy Application Checklist - PO/Developer 4.) Develop the Requirements Traceability Matrix (RTM) -Team 5.) Develop Version Description Document (VDD) - Team 6.) Develop Systems Design Document (SDD) - Team 7.) Develop V&V Intake Form - Team 8.) Develop/Provide Summary Test Script - Team 9.) Requirements Specification Document (RSD) - Team 11.) Code Review Questionnaire - Code Review/Security Bodies 12.) All dependencies are documented on intake page - Team 13.) Instructions have been included on the intake page on how to deploy the app to QVE 14.) Instructions on how to deploy to SQA have been included on the intake page
ABA-35	Implement "Show Only Common Species" Search Filter	As a VA Provider, I want to see a list of the most common species so that the Antibioqram app search results provide an easy way to see the most desirable results for an experienced user.	1.) When "Show Only Common Species" filter is selected, only the common species will be displayed at an aggregate level. Buisness Rule(s): a. From the fixed bucket list (Gram Positive Cocci, Gram Positive Rods, Gram Negative Cocci, Gram Negative Rods): 1.If the 'Show Only Common Species' filter is selected, the common species listed will be displayed (as applicable) at an aggregate level, with no organism roll-ups. 2.If the 'Show Only Common Species' filter is not selected, all SNOMEDCUI within the gram attribute that have a direct species roll-up will be displayed in their SNOMED hierarchy. Note: If the species field is 'NULL' it will not be included in Antibioqram 2.0. The species field must have a mapped SNOMEDCUI to be displayed in this view. ii. From the Search tab: 3. If one of the four gram stain(s) is entered, refer to for how dataset will be displayed.

			<p>b. Exceptions:</p> <p>i. All aggregate data will use the same algorithm as applied to the entire data set with the exception of the following:</p> <ol style="list-style-type: none"> 1. Staphylococcus aureus (Calculation = sum of all child SNOMEDCUI data including MSSA and MRSA) 2. a. Staphylococcus aureus (MSSA) (Calculation = display SNOMEDCUI data for this organism at child level) 3. b. Staphylococcus aureus (MRSA) (Calculation = display SNOMEDCUI data for this organism at child level) 4. 2. Staphylococcus coagulase-negative (Calculation = sum of all child SNOMEDCUI data including SNOMEDCUI data for Staphylococcus lugunensis) 5. a. Staphylococcus lugdunensis (Calculation = display SNOMEDCUI data for this organism at child level) <p>ii. SNOMEDCUI data for S. Saprophyticus will be grouped into Staphylococcus coagulase-negative and not displayed individually.</p>
ABA-38	#NF Backend Development and Data Display	As a VA provider, I need to be able to ensure the isolate, species, or organism name displayed is mapped to the corresponding SNOMED CT and LOINC codes and reflected in the application accordingly so I can quickly identify the species or organism I am viewing based on CLSI standards.	<p>1.) The data displayed will be expressed using nationally recognized reference and authoritative terminology standards such as LOINC and SNOMED codes stored within the CDW.</p> <p>2.) Any organism or species name entered by a lab technician that does not map to an existing SNOMED CT within the appropriate table will be excluded from the Antibigram 2.0 application, and not included in any calculations.</p>
ABA-398	Architecture for Antibigram 2.0	As a PO I want to see a diagram of the architecture So I can understand the information flow.	1.) A diagram of the architecture for Antibigram 2.0 containing information flow is created.
ABA-409	PMAS - Fortify	As a developer I need to create and audit the final set of fortify artifacts in order to complete the fortify PMAS requirement.	<p>1.) Audit backend</p> <p>2.) Audit frontend</p>
ABA-41	Patient Safety 1.1 Remediation: Add Content to the Help Page	As a Patient Safety compliance reviewer, I want to ensure there is a Help page that the user can reference so that he/she can understand the context and purpose of the	1. The Help page contains the following text: The empiric antibiotic regimen chosen should include, in general, antibiotics to which the suspected etiological pathogen(s) will demonstrate in vitro

		<p>Antibiogram data.</p>	<p>susceptibility. Be aware that when the number of isolates tested is low, the percent susceptible becomes unreliable and it may be necessary to refer to the literature or to specialists. Risk factors for antibiotic resistance, including admission from a nursing home, previous antibiotic exposure, etc, should be taken under consideration when making this choice.</p> <p>There is no universally recommended minimum percent susceptible for empiric treatment with an agent. The exclusive use of agents that demonstrate 100% susceptibility will lead to the routine use of overly broad-spectrum antibiotics. Not covering a pathogen adequately has been linked to higher patient morbidity and mortality. This decision should be made by an experienced physician. Please also be aware that, for some organisms, in vitro susceptibility may correlate poorly with clinical treatment success. For example, Enterobacter species may appear susceptible to cephalosporins, but treatment failure can ensue after cephalosporin use through the selection of subpopulations with de-repressed AmpC beta-lactamases. Because Antibiograms do not indicate agents of choice for particular diseases, Antibiograms should always be used by or under the guidance of clinicians who are familiar with both the likely disease and the antibiotics listed.</p> <p>Pharmacokinetics and pharmacodynamics (PK/PD) must also be considered, i.e., how drug levels change over time in the different tissues relative to the likely minimal inhibitory concentration of the pathogen. For example, be aware that there are different penicillin breakpoints for Streptococcus pneumoniae depending on whether the infection is pneumonia or not. Other examples: Nitrofurantoin should only be used for urinary tract infections as it does not attain appreciable levels in other tissues. Daptomycin binds to surfactant and should never be used to treat pneumonia. Also, please note that the published breakpoints for susceptibility may be too high, particularly for new antibiotics. For example, even</p>
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			<p>though the tigecycline MIC was set at 2.0mg/L for Gram-negative enteric bacteria, the probability of attaining PK/PD targets at this MIC was almost zero (EUCAST citing manufacturer's data). An Antibigram should never be used alone to select therapy. The potential for synergy and antagonism should also be considered. The combination of beta-lactams and aminoglycosides is a well-studied example of synergy. Historically, children treated with chloramphenicol plus tetracycline for meningitis fared worse than those treated with chloramphenicol alone. Although various synergy studies exist, they should always be interpreted with the help of an infectious disease specialist.</p> <p>Toxicity and allergies should be considered in light of the patient's history, condition, and comorbidities. For example, the use of aminoglycosides in individuals with renal or hearing impairment should be considered in light of the patient's whole clinical condition. Navigating the cross-reactivity above different classes of beta-lactam antibiotics should be performed with guidance from allergists or infectious disease specialists.</p> <p>Individuals who are unfamiliar with the use of an Antibigram should consult with a more knowledgeable physician because there are several instances where it assumes knowledge of the reader. For instance, methicillin-susceptible Staphylococcus aureus should not be treated with methicillin; methicillin is a toxic antibiotic that is no longer commercially available and is simply a marker for resistance to beta-lactams in general. In complex cases, pharmacy and/or infectious diseases should be consulted.</p> <p>Note: Text provided by Dr. Jones. This addresses Patient Safety issue attached.</p>
ABA-50	Preparing the App to Be Integrated into MAE	As a PO, I need to ensure the application is deployable in the MAE environment so that it can move through SQA testing.	1.) Documented instructions on how to deploy the app to integration into MAE (includes the script along with instructions for getting the icon on LaunchPad, as well as instructions for deploying the backend resource to weblogic (as applicable).

			2.) Antibigram data is integrated into the MAE environment to be used for UAT/Pilot.
ABA-55	#NF Set Up the Automated Testing Environment	As a tester, I need to ensure that the automated testing environment has been set up so that testing and code changes can be stored in the appropriate environment	1.) Set up the automated testing environment so that they can push it to the release branch. 2.) All code is stored on Stash.
ABA-58	Technical Spike: Mapping the Backend	Taking time perform independent research to understand the scripts and map the backend.	1.) Data mapped and completed table containing the appropriate mock data.
ABA-77	Make App Deployable to Test Environments	As a PO, I need to ensure the app can be demo'ed to the stakeholders So that we can obtain business owner acceptance upon every sprint completion.	1.) New set of Jenkins jobs have been created. 2.) Back end and front end are deployable.
References			
Reference Description			Link or Attachment
Program Level Requirement Changes			
List any required changes to program level RSD	JIRA Change Request Issue Number		Link or Attachment of Change Pages

Signature Section

I have reviewed the Mobile Application Requirements Addendum and find it acceptable.	
Signature or E-signature of Lead Analyst or Application Owner	Date

I have reviewed the Mobile Application Design Addendum and find it acceptable.

Signature or E-signature of WMS Project Manager

Date

I have reviewed the Mobile Application Design Addendum and find it acceptable.

Signature or E-signature of VA OI&T Project Manager

Date