TeleCAM
Teleconsultation in Child Abuse Medicine

visualshare
communicate with pictures

TeleCAM™ USER MANUAL

Welcome to TeleCAM™— a web-based application that provides a workflow and framework for quality review of child maltreatment. In this sense it is very much like a telemedicine solution that maintains the history, exam information along with the images and video that is part of the evaluation process for future reference, training and decision support.

The underlying framework that supports the TeleCAM application stores all collected information in a single record that can be re-used for many stakeholder requirements, such as internal or external reviews, quality assurance/quality control, audit and evidentiary logging purposes.

The system is secure and HIPAA compliant and uses standard encryption technologies for all communication and all communication is based on roles for each user. Authorized users of the TeleCAM system are authenticated to the system and must login to access data according to the role assigned

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1.1 Overview

TeleCAM is a web-based (Internet) application. Because the TeleCAM application is an Internet application it is also accessed through a Uniform Resource Locator (URL). Also known as a web address, the URL locates the application, loads it into the web browser and prompts for login and password information. Once logged in, the user is able to create a clinical case and populate the case with information about the patient such as images and textual descriptions. The TeleCAM workflow is designed to reflect the pediatric case collection needs in child abuse diagnosis. The workflow is designed to become a record that contains information on how the case was created, demographic and clinical data, genital exam data and photo documentation (images) that are part of the clinical case.

At each stage during the creation of a case, there is a button that requests the user to update the content of that section. Updating each section validates and incrementally saves the content of that section allowing the user to incrementally add data to the clinical case record. TeleCAM follows the rule for Internet applications and is therefore designed to force the user to save data in steps. Validating the case content at each stage in the case creation phase prompts the user to get into the habit of saving material/content in the web application and moves the case to the next stage in the process.

1.2 Who Can Use TeleCAM^{tm}

TeleCAM^{tm} recognizes that different people have different needs. By assigning packages of features to each role a person may have in the clinical evaluation process, TeleCAM^{tm} can accommodate almost anyone. The following describes these roles and their special features:

- Administrator—The administrator's primary role is to manage the system. This includes creating users and sites. See Administrators, for additional Administrator guidance.

- Examiners —Examiners oversee the forensic collection and interview process.

- Reviewers—Reviewers complete the peer/quality review process.

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1.3 Icons and Alerts

The following icons help you readily identify quick bits of helpful information:

- Tip—This icon suggests smart approaches to data field entries.

- **Important**—This icon provides help in preventing common errors or misconceptions.

- Hyperlinks: Blue text that is underlined is linked to additional information elsewhere in the document. Press CNTRL+CLICK to follow hyperlink.

- **Red Text:** When entering or editing data, you may encounter a TeleCAM^{tm} field that is displayed with red text—this indicates places where information is required. Other fields are not essential. For example, in the picture below, the following fields must be filled out:

1.4   Software Requirements

Most computers have the required software applications to use TeleCAM and 90% of the time, the currently installed Internet browser contains or includes the necessary applications already configured to run TeleCAM.

The following list contains the required software and plugins to start using TeleCAM. To get started using TeleCAM you will need to have the following items:

- Computer with Internet Access

- A current web browser such as Microsoft Internet Explorer (v.7.0) or Firefox (v.1.5.0.6)

- Java Runtime Environment (JRE 1.4.1 or greater) which allows your Web Browsers to run Java Applets

- Javascript enabled

- Current Adobe Flash player (9.0)

All of the software contained in the list is available from the following sites:

Microsoft Internet Explorer can be downloaded from http://www.microsoft.com/windows/ie/default.mspx

Mozilla Firefox can be downloaded from http://www.mozilla.com/firefox/

Java Runtime Envirinment (JRE) http://java.com/en/download/index.jsp

Adobe Flash Player plugin at http://www.adobe.com/shockwave/download/index.cgi?P1_Prod_Version=ShockwaveFlash

1.5   Accessing TeleCAM through a URL

Launch Internet Explorer (or other web browser) and enter the url for TeleCAM. It is advisable to add the TeleCAM site to your favorites list to make it easier to access in the future. To do so, select favorites from the browser window and add to the list.

Once the login page appears, enter user login and password information and press return or place the cursor over the 'sign in' button and click.

Figure 1: Accessing TeleCAM through a URL
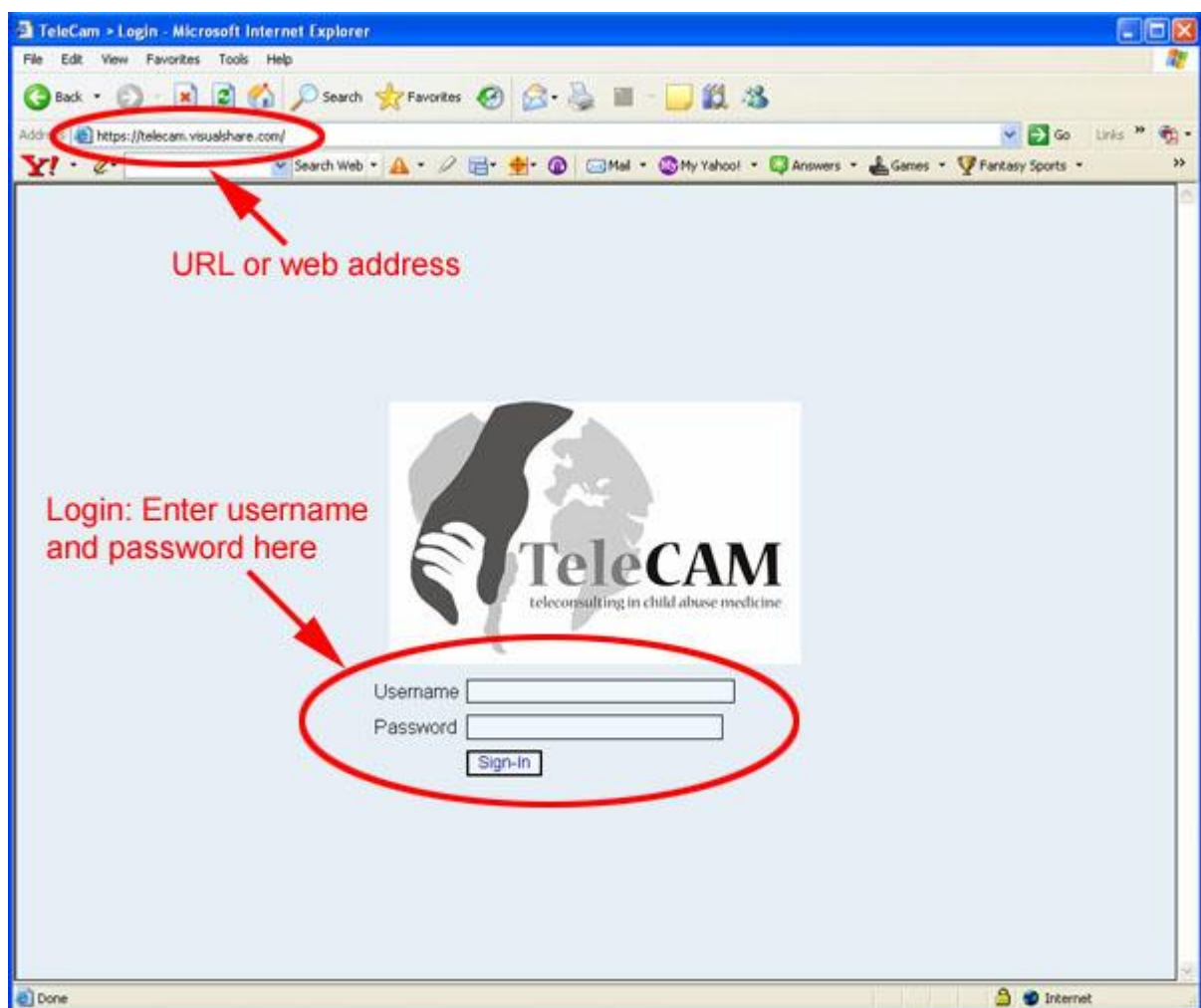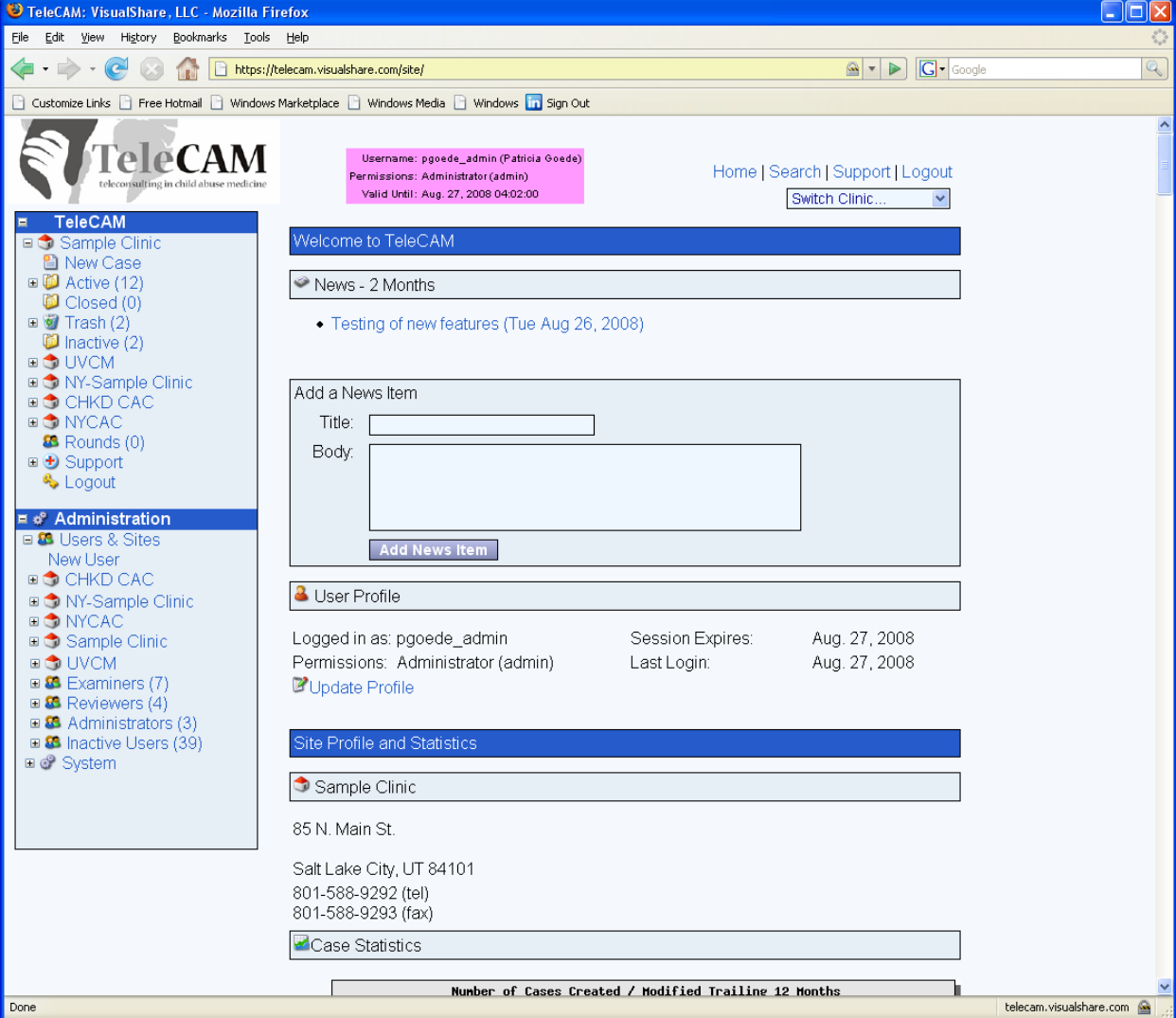

1.6   Recognizing Common Features and Terms

As you begin to use TeleCAM[tm], it will become apparent that there are certain themes, or features, that are consistently used throughout the program. These features are designed to help make your TeleCAM[tm] experience efficient and simple. The screenshots, below, show some of the features that you will encounter.

Dashboard: The doorway to TeleCAM^{tm} can be opened from the main <u>dashboard</u>. The dashboard is a main menu of links that appears on most of the screens. The screenshot, below in <u>Figure 2: TeleCAM</u> Dashboard, shows what the "Dashboard," or primary toolbar, looks like. <u>Welcome to TeleCAMtm—Navigating the Home Page</u> explains its uses further.

Figure 2: TeleCAM Dashboard

Shortcut Menu: For navigating ease, there are several ways to get to your favourite pages. (These pages usually include Home, Search, Support, and Logout.) One of the quickest ways is to use the blue menu bar on the top, right corner of most pages. This shortcut menu bar is shown below.

Figure 3: Shortcut Menu
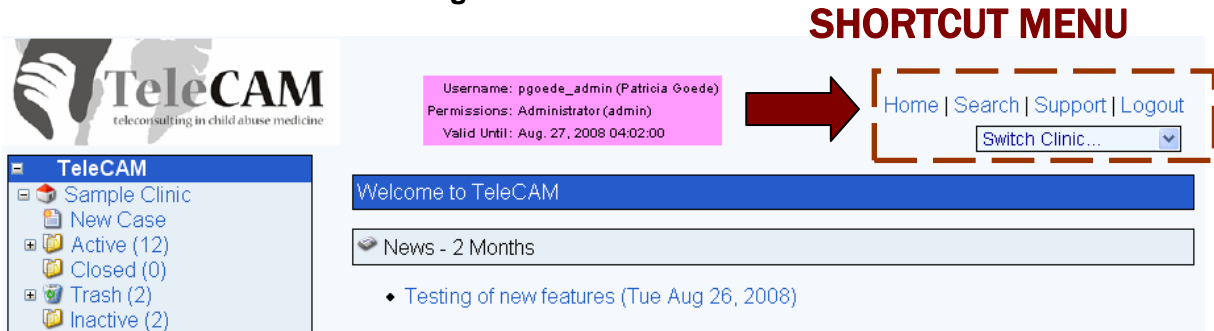
Search Feature: The search feature allows users to search fields based on Case Name, Case Alternate Name, Date of Service, Patient Firstname and Patient Lastname.
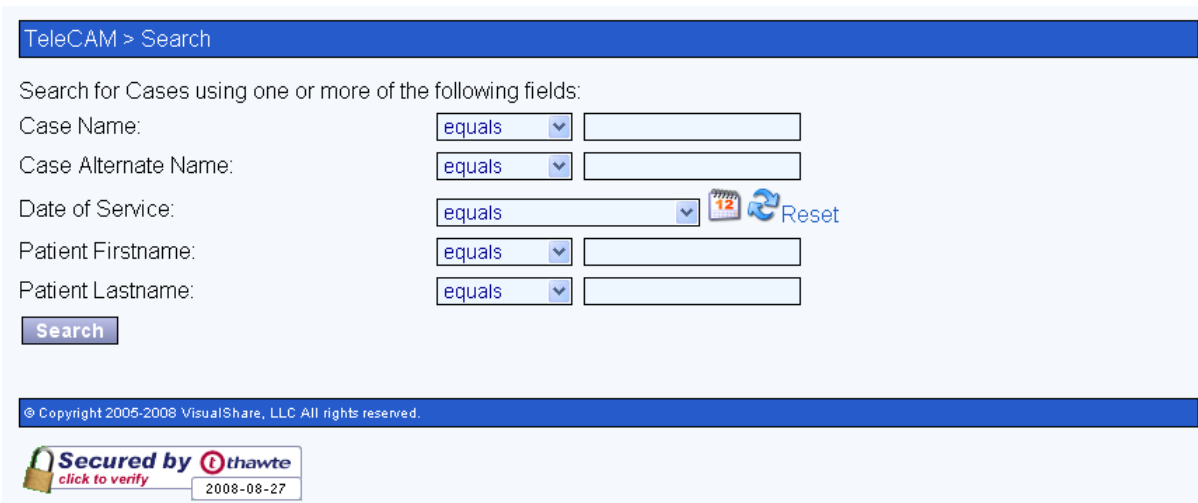
View/Hide Screen: Another helpful feature of TeleCAM^{tm} is the ability to View or Hide portions of your screen. This allows you to view multiple items efficiently, or to focus on one piece of data at a time. The View/Hide Screen feature appears on most pages as shown below.

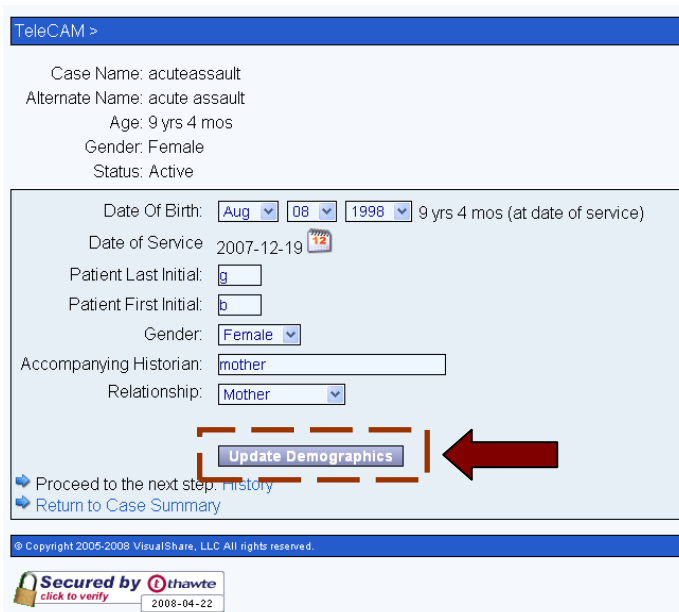**Figure 4: View/Hide Screen**
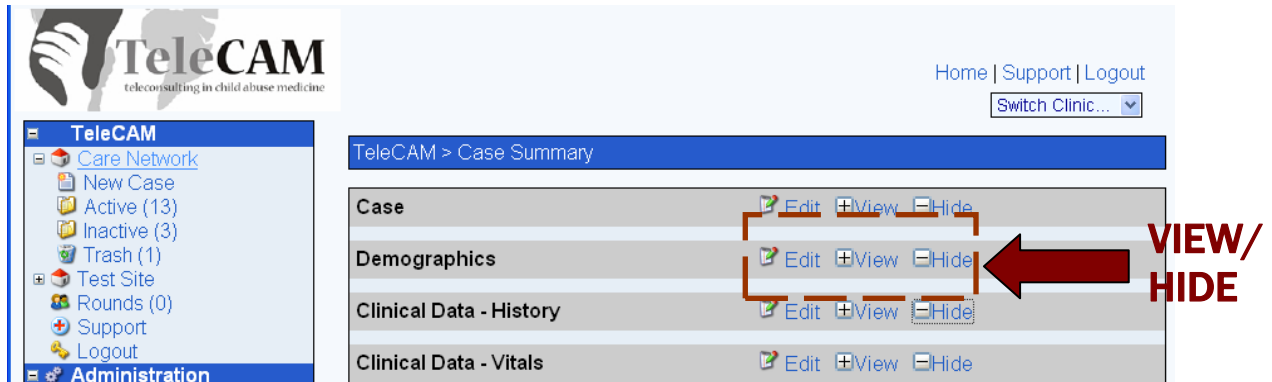
Editing Data: Editing data is possible from most screens that display data. Simply click Edit (see edit link in Figure 4) and you will have the opportunity to correct errors, add information or make changes. Examples of this are shown in <u>Figure 5: Editing Data</u>.

Important: Once information has been changed, you cannot revert to previous data.

Figure 5: Editing Data

Once the edits/changes have been made, click the Update button in this case, Update Demographics to save your changes.

2.   Getting Started

2.1   Logging In

Once a new account has been set up by the administrator and the username and password have been retrieved from e-mail, you can go to the log-in page and fill in the fields. See Figure 6.

Figure 6: Login Page

Tip: Passwords are case sensitive. Make sure the Caps Lock key is not engaged. If you click Sign In and receive a message that says your information is invalid, than speak with your company administrator. If the page does not load, or you receive an error message, contact the software provider, VisualShare, by clicking Support on the Dashboard.

Important: Keep your password in a safe place. If lost, please contact the system administrator and a new one will be created.

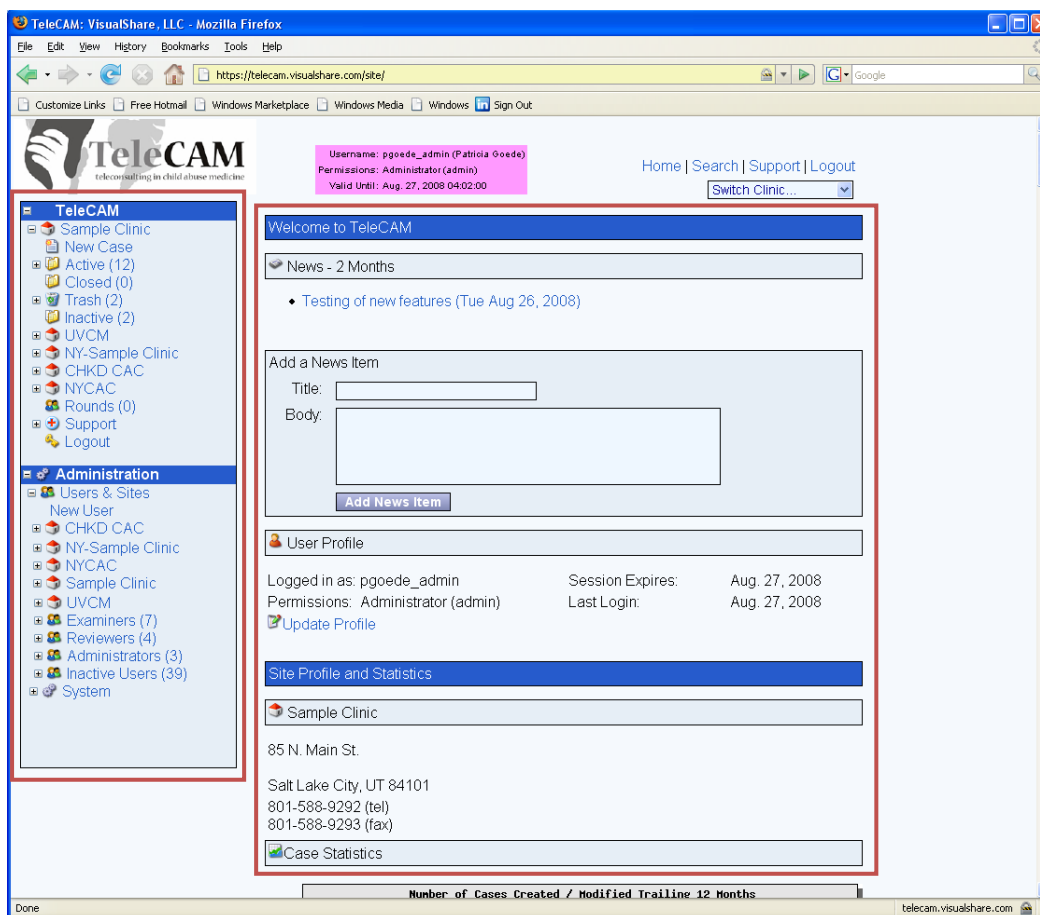## 2.2 Welcome to TeleCAM^{tm}—Navigating the Home Page

After logging in, you will see the home page (Figure 7:). All cases begin here. The homepage displays several important elements as follows:

The TeleCAM application dashboard contains information in the Control Panel to the left and News, Profile and Site information to the right in the body of the window.

The TeleCAM Control Panel is located on the left side of the screen. It displays an outline of information. Initially, only the highest level of the outline is displayed. The ⊞ icon next to any item in the TeleCAM Control Panel indicates that when you click, a menu will expand underneath the item you clicked on. When a menu has been expanded, ⊞icon converts to a ⊟icon. You can click on the ⊟icon to collapse (or hide) the menu.

Dashboard: To the left of the statistics graphs, is a list of links. They contain information for labs associated with each user and allow more data or image services to be added. This is the doorway to TeleCAM^{tm}. Figure 8: Dashboard Description, gives a brief description of each link's function.

Figure 7: Dashboard

2.3 Update User Profile

New users of the TeleCAM™ system should after the first login, change their password. To do so click on the Update Profile link in the User Profile Box. Enter changes and click the Update User Profile button to save changes.

Password Strength - VisualShare has implemented a password "strength" utility for TeleCAM user accounts. When creating or modifying a user account there is visible feedback (weak, moderate, strong, and so on) rating or ranking the "strength" of a user's password. A user's password is the secret part of their secure access to TeleCAM. VisualShare is providing this as a helpful mechanism for customers to establish good password rules and policies. In general, a good password is one that is at least 8 characters long, has at least one number (1,2,3, ...) and has at least one uppercase (A,B,C...) AND lowercase letter (a,b,c,...). Adding other characters such as @, $, #, ^, ! also improve the strength of a password. Currently TeleCAM requires that a password be 8 or more characters. Otherwise, password policies are at the discretion of TeleCAM customers.

Figure 8: Dashboard Description
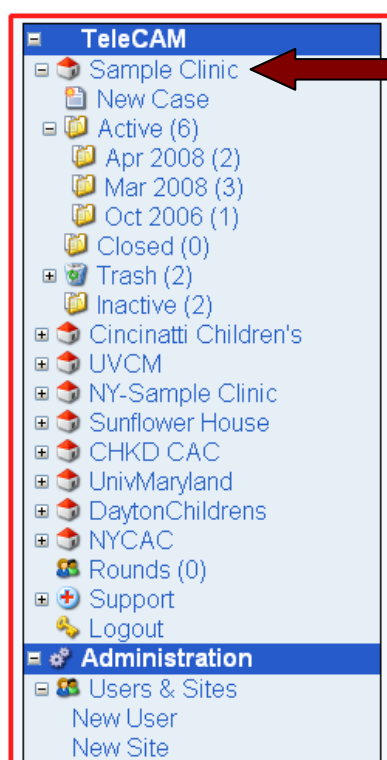
This is the name of the clinic or site

- **New Case:** Create new case and enter new case information
- **Active Case:** List total number of cases that are active
- **Active Cases:** Locate active cases by month and year
- **Closed Cases:** Locate cases that are closed
- **Trash:** Cases that are deleted to the trash
- **Inactive Cases:** Cases that inactive (see Inactive Case Streamlining below.

Enhanced Navigation - This new feature extends the existing user friendly navigation on the left-hand side to include a monthly sub-folder organization of cases. This feature has been requested by customers with large case volumes. At the same time, the feature will not impact those customers with lower case volumes.

Inactive Case Streamlining - Inactive cases are now cases that are either closed (completed an examiner initial diagnosis, reviewer review and examiner final diagnosis) AND are older than a specified number of months. The specified of months may be

selected by each customer and will be set to 6 months as a default. All cases that are completed or indicated as inactive AND are older than the specified number of months will appear in a folder labelled "Inactive".

3.   Creating a New Case

When a new case is created, it can be logged in, and the history can be tracked. The information entered here is the fundamental building block for all other functions in TeleCAM^{tm}. The care with which data is entered here is important. Below, each step for entering initial sample data is explained.

If you are creating a new case, you will be required to enter a Case Name. An Alternate Name is not required. Note the red text indicating that all fields are required for you to proceed. After naming the case, press the 'Create Case' button

3.1   Click New Case: Click New Case on the Dashboard, and fill in the data fields as follows:

Figure 9: Creating a New Case

Case Name: Recorded automatically. TeleCAM^{tm} will automatically assign a distinct id to each new Case, this field ties the sample name back to your own system and company naming protocols.

Alternate Name: An ID used for identification – not required.

Date of Service: Date of service establishes the date the case was created. Press calendar icon with cursor to display calendar picker.

Rounds Expiration: The Rounds feature is used to promote the case to a read only for view by all users in the system.
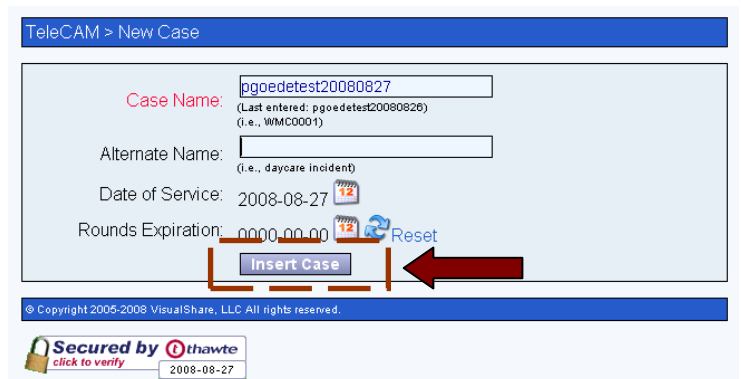
Rounds Feature - Minor adjustments to the permissions and access to the rounds feature thereby enabling all system users to access cases in the "Rounds" folder until the expiration date. The Rounds feature has proved invaluable for those wishing to share a case with all users of a given installation.

Click Insert Case: After filling in the data fields and clicking Create Sample, you will receive either a Success Message, in green, at the top of the next screen (Figure 10: Success Message), or an error message that explains which data fields need attention.

Important: Your new sample data will not be saved until Insert Case has been clicked and a Success Message has been displayed.

Tip: Fill information fields as fully as possible at this stage in order to create strong building blocks for further data.
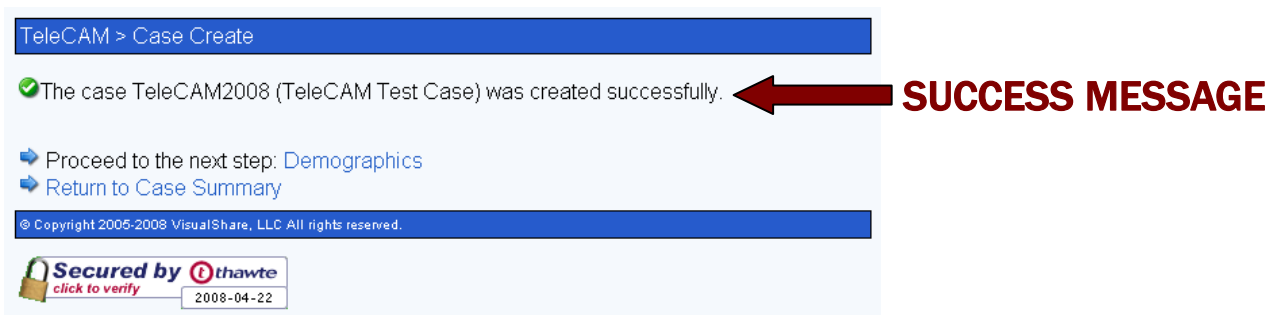
Tip: Data field names in red indicate essential information; they must be filled out.

Figure 10: Success Message

Tip: It is a good idea to intelligently code your Case Names. Consider the case name WM120205SWC2. WM could stand for Weber Morgan Clinic. 120205 represents the date December 2, 2005. SWC are the initials of the person creating the case, and 2 indicates the second case entered on that date by SWC.

Tip: The Alternate Name provides a space to give the case a name that makes it easy to remember and reference. It can be descriptive such as Altex Preschool or it could be a code name designed to protect privacy such as Project Super Hero.

If you are opening an existing case, these fields will display the Case Name and Alternate Name already assigned to the case.

3.2 Demographics

Click on the Demographics links to enter demographic information or click on Return to Case Summary to return the entire case.

To enter the Date of Service, click on the calendar icon to see a pop-up calendar and choose the date.

Navigate to the correct month by using the arrow buttons located above the days of the week. Or click and hold down any button on the calendar to see and select from a list of options.

Tip: Move the calendar to view any information behind it by clicking and dragging the bottom gray bar of the calendar.

When you have finished entering data, click the Update Demographics button.

Figure 11: Entering Demographic Data

Once the demographics have been updated, a confirmation screen appears that gives the details that the case was successfully created that includes demographics and prompts you to move to the next section Clinical Data: History. At any time throughout the case creation process, you can click the link 'Return to Case Summary' to review the contents of the case.

3.3 Clinical Data

The Clinical Data section contains three items: History, Vitals, and General Physical Exam. To see these topics, select Clinical Data from the TeleCAM Control Panel on the left side of the screen. Then select the topic for which you would like to enter data.

Enter History information by clicking inside the field and typing the information. When you have finished, click the Update History button.

Figure 12: History

Once the update history button has been selected, a confirmation screen appears that gives the details that the case was successfully created that includes demographics and history and prompts you to move to the next section Clinical Data: Vitals. At any time throughout the case creation process, you can click the link 'Return to Case Summary' to review the contents of the case.

TeleCAM > Update History

History for case: WMC10002PG06 (Daycare Incident) was updated successfully.
Proceed to the next step: Clinical Data: Vitals
Return to Case Summary
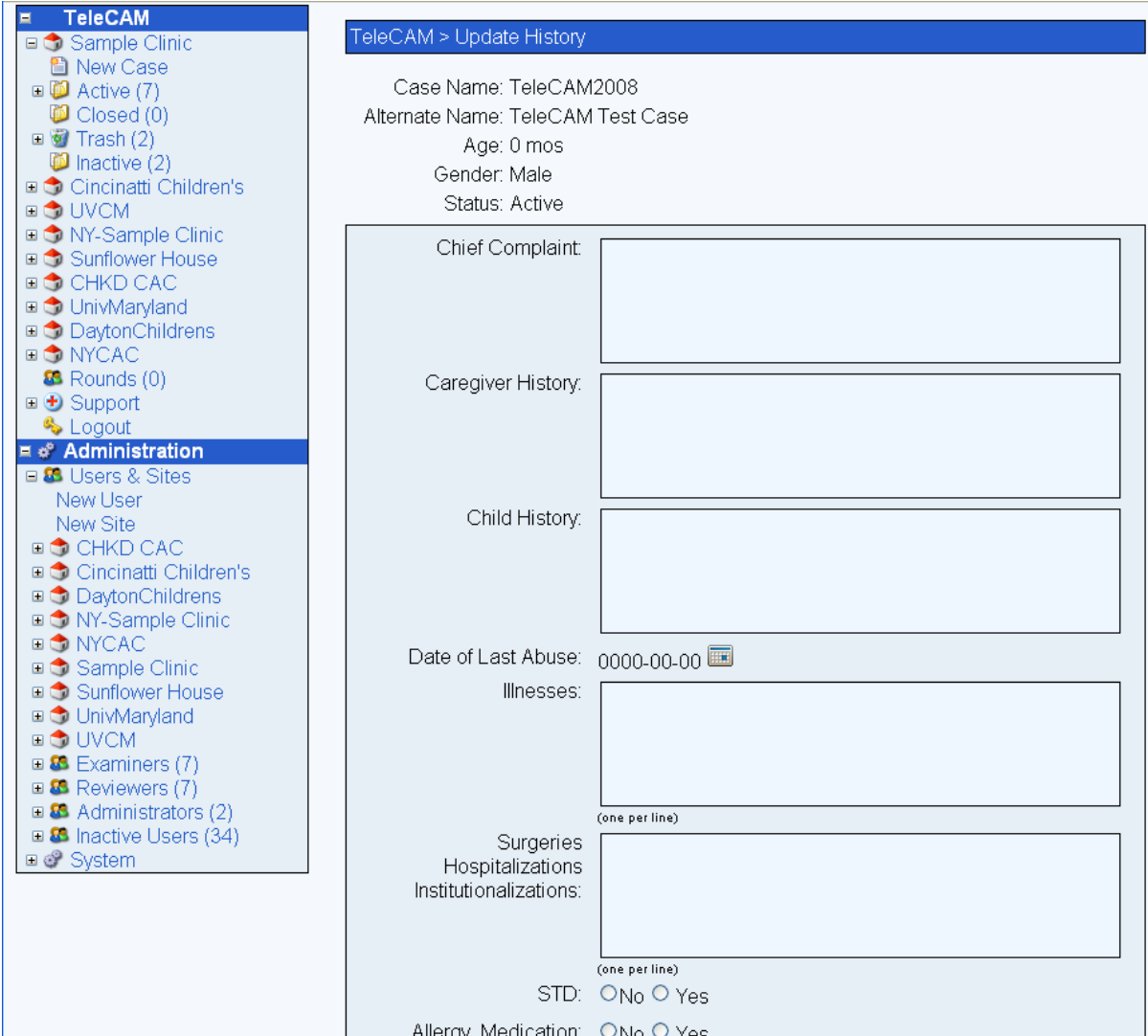
© Copyright 2005 VisualShare, LLC

Tip: TeleCAM is designed to allow the user to add clinical case material to the case in an iterative fashion. For example, creating a case prompts the user to 'create case' before moving to the next section: Demographics. Demographics is updated and added to the case before proceeding to the next step: Clinical Data: History. Likewise the History must be updated before moving to Clinical Data: Vitals section.

Clinical Data entry for Vitals, General Physical Exam and Genital Exam are entered but not required.

Important: Each step case creation data entry requires that the user update each section of the case record after entering or changing information by clicking the "Update" button located at the end of the field.

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4.	Upload and Management of Images

4.1 Accessing image upload:

At any point in the case entry process images can be uploaded and added to a case. To access the image upload: 1) locate the Clinical and Radiology Images section in the case, 2) click on the link "Upload", 3) confirm that the pink drag and drop screen appears indicating that the Java applet is launched (see figure 13).

Figure 13: Upload Image(s) Interface
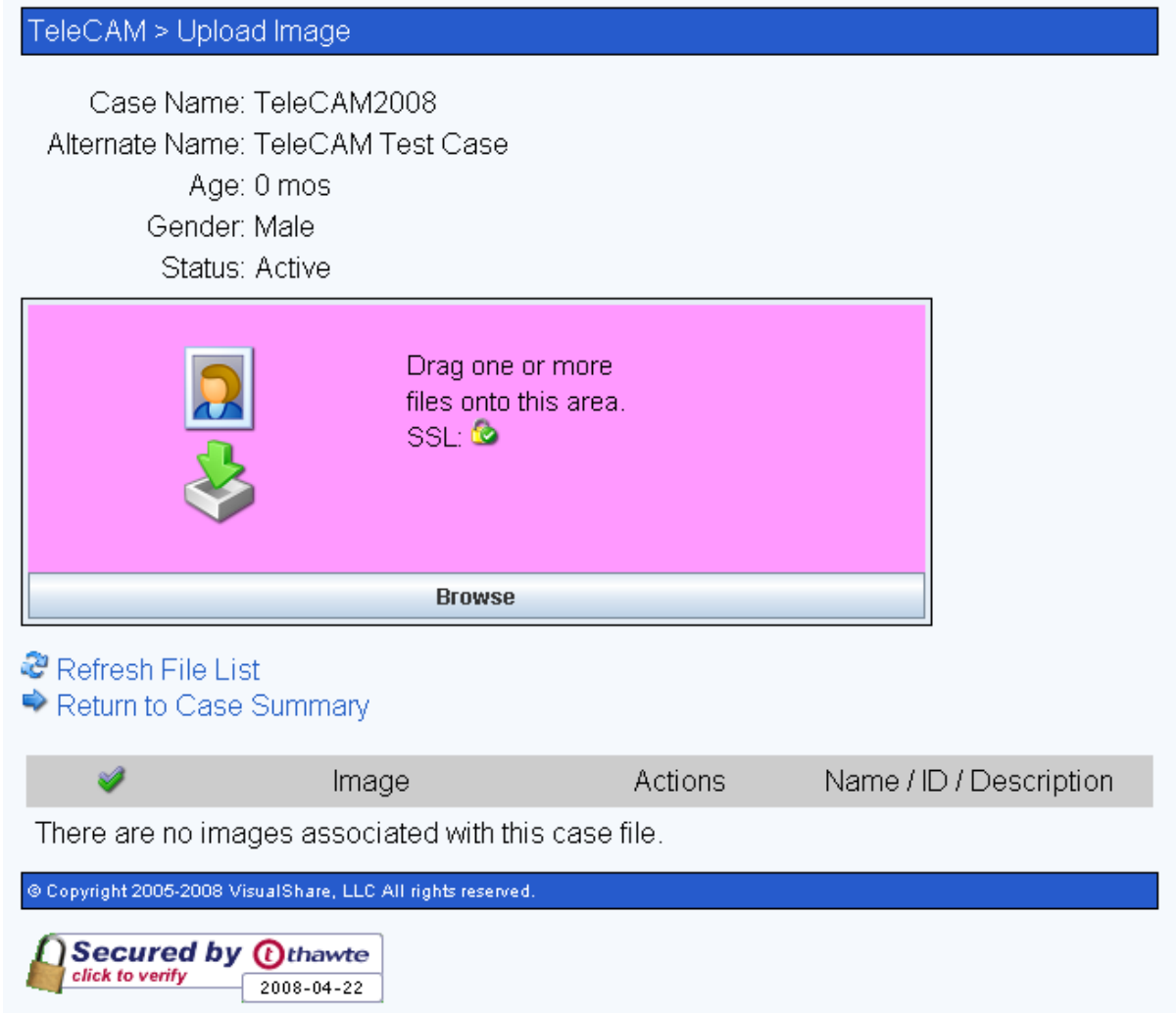
TeleCAM supports two main methods for uploading images 1) drag and drop and 2) single image upload via the browse feature.

4.2   Multiple Image Upload:

To upload images using the drag and drop feature go the file directory/folder where the images are located, select multiple images using one the following two methods 1) drag the cursor over the images to select them or 2) select multiple images by holding down the control key while clicking on each individual image.

Once the images have been selected hold the left mouse button down and drag the images to the pink area containing an icon of a person with a green arrow.

Note that you can select and upload multiple files at any time. During the process of uploading images, you will see a confirmation box that indicates what percent of the image upload is complete.

Figure 14: Image Upload in Progress
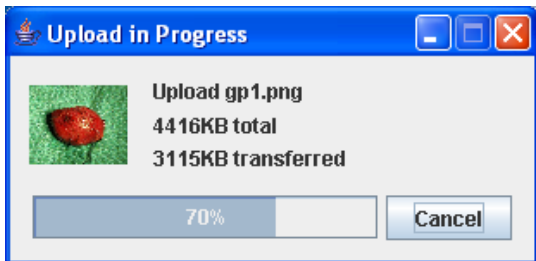
4.3   Single Image Upload

To upload images as single files click the "Browse" button at the bottom of the pink image upload box that will allow for browsing directories to locate images for upload much like a standard Windows or Macintosh operation.

Figure 14: Single Image Upload
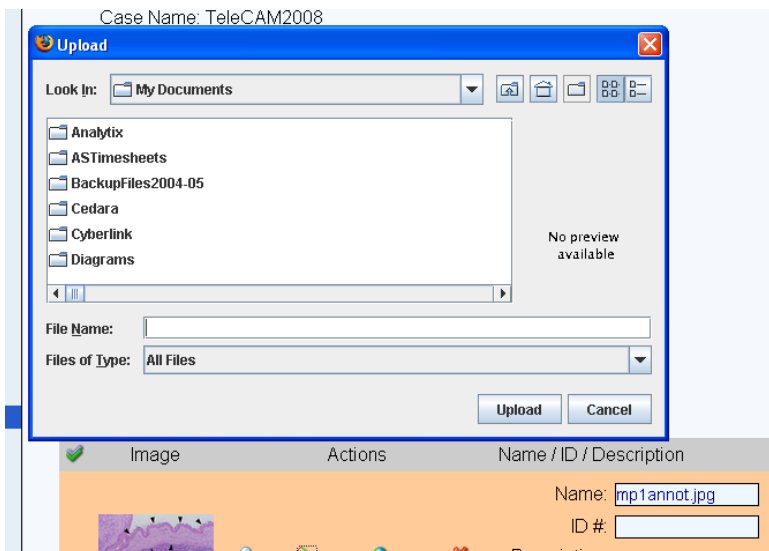
Once the image Upload in Progress in complete, a thumbnail of the images will appear in the grey box indicating that the upload process is complete. To view a list of the image thumbnails, select the 'Refresh File List' directly below the pink box. The 'Refresh File List' generates a complete list of the images just below the pink box.

Figure 15: Summary List of Images for the Case

Image Names and Descriptions - VisualShare has added the ability to enter image names and descriptions. As a default the image name and description will the name of the image file when uploaded.

Dynamic, Image Rollover - This feature allows a user to rollover image thumbnails for a larger preview prior to viewing a given set of images.

4.4   Clinical/Radiological Images: Download All Images

You can download all images at once to your computer as a .ZIP file. Click the text Download All Images to see a File Download dialog box. You can choose the Save button to save the file to your computer for future use or you can choose the Open button to unzip the file immediately. To open a .ZIP file, you will need to have a program such as WinZip already installed on your computer.

4.5   Clinical/Radiological Images: Preview or Annotate an Image

To preview or annotate an image, click on Preview or Annotate to the right of the image thumbnail. The enlarged image will appear in a new window. Note that you can also preview an image by clicking on the image name listed in TeleCAM Control Panel on the left of the screen.

4.6   Clinical/Radiological Images: Delete an Image

To delete an image, click on Delete to the right of the image thumbnail. A confirmation dialog box will appear requiring you to confirm that you really want to delete the image. Choose the OK button to delete the image. Choose Cancel if you do not want to delete the image.

5.   Peer/Quality Review
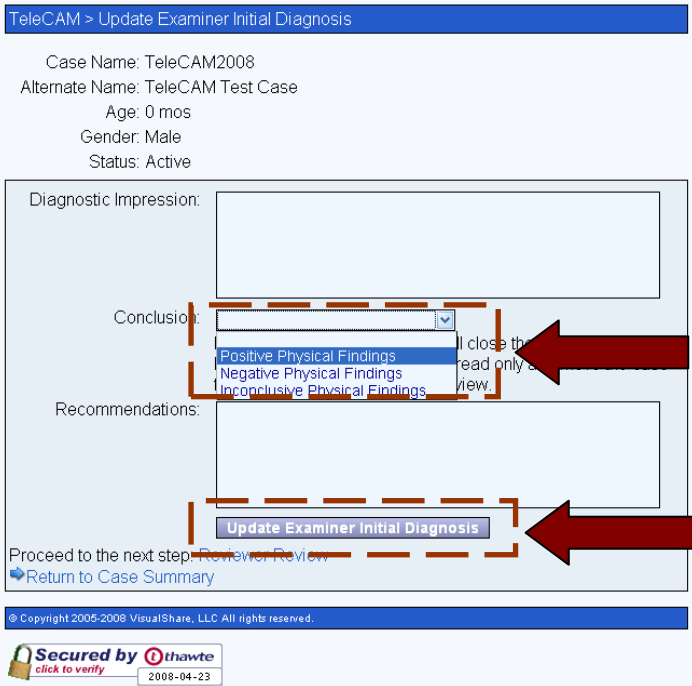
5.1   Initial Diagnosis

For every case that is peer reviewed, there is an examiners initial diagnosis that is required to move the case to the peer review stage of the process. The first stage is comprised of steps described above that allow for case creation, addition of textual information from interviews, collection of forensic data and images all linked in a consultation record.

The purpose of the consultation record is to track the dialog between the initial diagnostic impression through the peer review and to the final stage, a final diagnostic impression. The examiner has the option of launching a discussion to collect the feedback of peers or may opt to skip the discussion and enter a final diagnostic impression. At any given state the individuals within a site can conduct a dialog and collect the results of the dialog for future training and quality assurance.

This section describes the initial diagnosis. After examining the images and data, the examiner can enter a preliminary diagnosis while further information is reviewed or gathered. Enter information by either clicking inside of a field or typing or by clicking the down arrow icon to the right of a field to select information from a list.

Figure 16: Initial Diagnostic Impression

To move the case to the Discussion or Final Diagnostic Impression cycle a Conclusion must be selected followed by the updating the Examiner Initial Diagnosis by clicking the Update Initial Diagnosis.

Important: When you select the Update button for the Examiner's Initial Diagnosis, the information will be saved and cannot be altered. The information can be viewed, but not changed again. Selecting the Update button will move the case on to the next stage of review and provide the user with two options 1) launch a discussion or 2) skip the discussion and enter a final diagnostic impression.
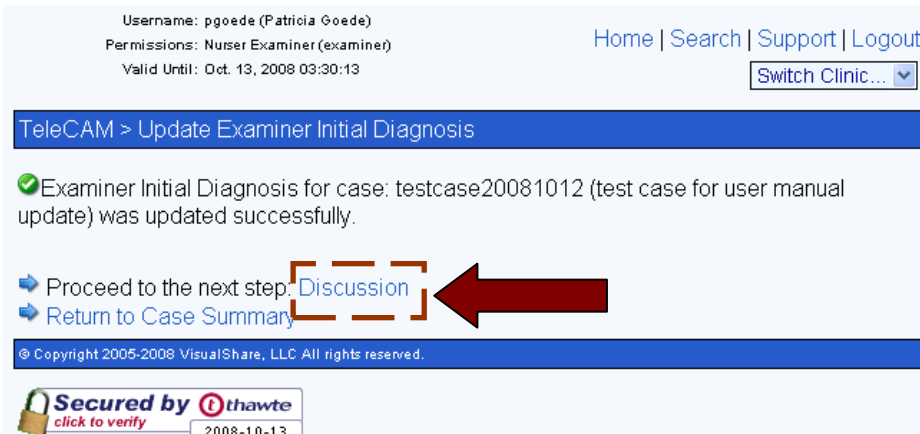
5.2   Peer Review Threaded Discussion

Once the Examiner Initial Diagnosis is complete (selection of an initial conclusion and pressing the Update Examiner Initial Diagnosis button) TeleCAM presents the user with two options: 1) launch a Peer Review Discussion or 2) skip the discussion and enter a final diagnostic impression. If the Discussion is initiated TeleCAM sends out a notifier via email to participants in the site that that the case is pending review. The notifier contains a secure link to the case. The secure link takes the user to the TeleCAM login screen at which point the user can access the threaded discussion.

The Threaded Discussion allows for individuals that are part of a multidisciplinary team to review the case information (images, text and reports) submitted by the examiner and provide recommendations based on that information.

5.2.1 Launching a Discussion for a Case

When the Examiner Initial Diagnosis has been entered a discussion link will appear that when clicked, launches a threaded discussion. To launch a discussion, select and click on the "Discussion" link to get back to the Case Summary.

The Discussion Button is located in the Discussion section located just below the Initial Diagnostic Impression section.

The Start Discussion button when pressed initiates a Discussion for the case and asks for a date that the Discussion will end. To select the date to end a Discussion click the calendar icon to select a date when complete select a time and press the Continue button to start the Discussion.

Once the Discussion is started, an email notifier will be sent to all participants that a new case has been created and a Threaded Discussion has been launched for all participants to contribute comments as part of the peer review. TeleCAM will send out an email notifier to each user in the multidisciplinary team for each new threaded discussion and when there is activity in the threaded discussion.

End Discussion

The Discussion will end at the time and date that was chosen by the person who created the case or, if the Discussion needs to end sooner, press the End Discussion and the Discussion will end and move the case the Final Diagnostic Impression.

5.2.2 Final Diagnostic Impression

When a Discussion is ended, the person who created the case or a designated reviewer can enter a Final Diagnostic Impression following the Discussion. Keep in mind that the Threaded Discussion is meant to encourage peer review and illicit feedback from members of a multidisciplinary team. When the Discussion has ended the case still remains in an active state until the examiner (or owner of the case) enters a Final Diagnostic Impression and closes the case.

After the Discussion for the case has ended, click the "Edit" link located in the Final Diagnostic Impression box. Clicking the "Edit" link opens the dialog box for the Final Diagnostic Impression.

The two fields that are required in the Final Diagnostic Impression are selection of a Conclusion followed by Update Examiner Final Diagnosis. These two items are required to move the case to the next step in the case lifecycle.

The final step to completing a case is the close the case. When the Final Diagnostic Impression is complete, TeleCAM will alert the user and provide a link to close the case.


Select the link "Close Case" that in turn will open a dialog box to formally close the case.
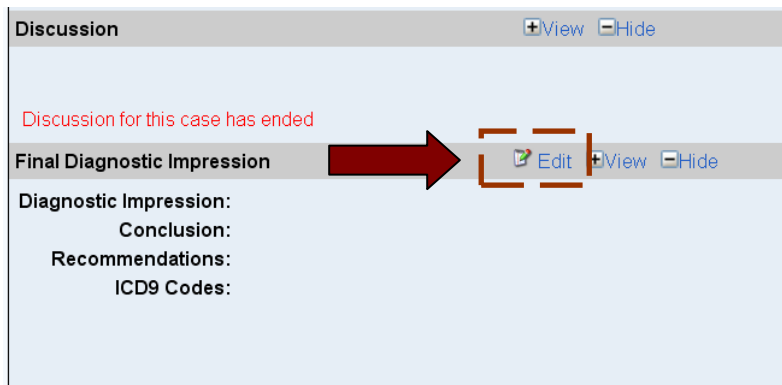
Important: When you select the Update button for the Consultant's Review, the information will be saved and cannot be altered. The information can be viewed, but not changed again. Selecting the Update button will move the case on to the next stage of review, the Examiner's Final Diagnosis.

5.3 Skip Discussion (No Peer Review) – Final Diagnostic Impression

The user who initiates the case can decide not to initiate a Threaded Discussion by skipping the Discussion section altogether. To skip a Discussion and proceed directly to the Final Diagnostic Impression select the Skip Discussion button.
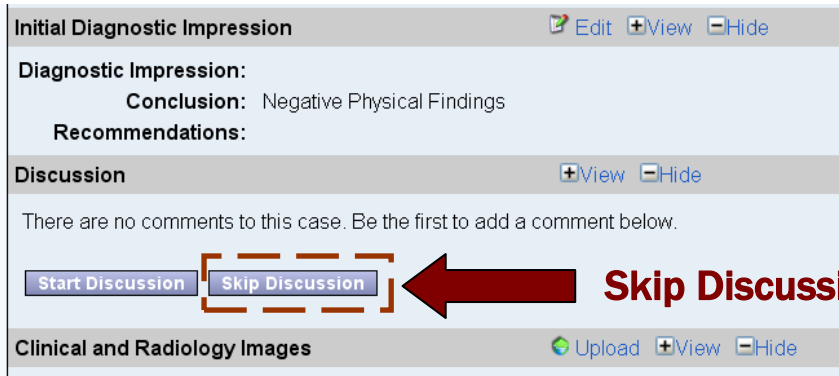
The Skip Discussion Button moves the case to the Final Diagnostic Impression state and can be completed by any member of the multidisciplinary team. No email notifiers are sent out if there is no Discussion for the case.

After the Discussion for the case has ended, click the "Edit" link located in the Final Diagnostic Impression box. Clicking the "Edit" link opens the dialog box for the Final Diagnostic Impression.

The two fields that are required in the Final Diagnostic Impression are selection of a Conclusion followed by Update Examiner Final Diagnosis. These two items are required to move the case to the next step in the case lifecycle.

There are narrative fields for entering textual information, a conclusion that are similar to the fields in the Examiner Initial Diagnosis section. Enter information by both clicking inside of a field and typing or by clicking the down arrow ⌄ icon to the right of a field to select information from a list.

A Conclusion must be selected followed by clicking the Update Examiner Final Diagnosis button at the bottom of the field.

The final step to completing a case is the close the case. When the Final Diagnostic Impression is complete, TeleCAM will alert the user and provide a link to close the case.

Select the link "Close Case" that in turn will open a dialog box to formally close the case.

Important: When you select the Update button for the Consultant's Review, the information will be saved and cannot be altered. The information can be viewed, but not changed again.

6. Reporting

TeleCAM™ generates reports in Adobe Acrobat .PDF file format. To open a .PDF file, you will need to have the free Adobe Acrobat Reader already installed on your computer.

To generate a report for each case click on the Sample Report link in the reporting field at which time the system will ask if you want to open or save the report.

You can choose the Save button to save the file to your computer for future use. Choose the Open button to view the file immediately.

7.   Support and Logout

7.1   Support

By clicking Support on the Dashboard, (or on the blue shortcut menu), you will be taken directly to the support website at support.visualshare.com.

7.2   Logout

One click on Logout ends your session and displays your login name with the permission set for that session. You also have the option to go to the log-in page and the next TeleCAM^{tm} user can sign in. See Logging In for more information on how to begin your next session with TeleCAM^{tm}.

Figure 19: TeleCAM^{tm} Session Finished

8.   Administrators

As mentioned in Who Can Use TeleCAM^{tm}, the administrator's primary role is to manage the system. This includes creating users and sites. The Dashboard, as shown in Figure 20: Dashboard for Administrators, provides opportunities to fulfil the function. Administrators have access to all labs. Pertinent current users can be found under the lab names.

Figure 20: Dashboard for Administrators
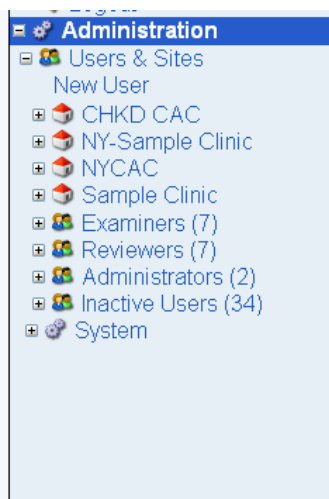
8.1   Creating Users

After clicking New User on the Dashboard, the administrator sets up the account by adding the appropriate information to blank fields. The fields include username, password, first name, last name, e-mail address, permissions associated with each role), sites (sites could have one or many the list is particular to each role), and expiration date.

The Expiration Date field not only allows for collaboration and guest accounts, but also is a way to render users inactive. Once a user becomes inactive, their account is shut down, and their info is stored. The stored information can be retrieved in the event that the user needs to be re-instated. It remains linked to data entries and notes. If needed, the stored information also provides an audit trail.

Once finished, click Add User. A confirmation message will appear on the next screen, along with an option to Update User. This allows you to modify user information by filling

in the fields. (The Update User button also can be found by clicking the user's name from the Users' Lists on the Dashboard.)

For security purposes, the system does not remember passwords. If lost, the password needs to be re-set by filling in a new one in the password field.

Once account setup is complete, or user information has been updated, the system automatically sends an e-mail to the user's personal account (supplied during account

TeleCAM > Update User

Username

Password　　　　　　　Strength: Type a password...

First Name

Last Name

Email

Permissions　examiner

Sites:　Sample Clinic
　　　Cincinatti Children's
　　　UVCM
　　　NY-Sample Clinic
(CTRL-Click to select multiple)

Expiration Date　0000-00-00　Reset NOTE: A value of '0000-00-00' means no expire date.

Add User

Helpful tips for making a strong password

1. Make your password 8 characters or more
2. Use mixed case letters (upper and lower case)
3. Use more than one number
4. Use special characters (!,@,#,$,%,^,&,*,?,_,~)

Strength scoring for your password above:

Tip: To create a strong password, try using a combination of letters, numbers and symbols. Generally speaking, the longer the password is, the better protected it is.