

1.0 Purpose

The purpose of this document is to describe the high level application specific requirements for the ClearView system.

2.0 Scope

The scope of this document consists of the Application Functions as a whole, no other systems requirements are defined in this document. The initial release of this document addresses only the requirements for the core system, this will be augmented as new requirements are introduced.

3.0 Definitions

Bitmap	A graphic format used by the system. All images captured by the system are stored in this format. The images are all 320 pixels by 240 pixels in size.
Calibration Image	An image captured using a probe rather than a human finger. This is used as a baseline in performing a calculation.
Coefficients	Numerical calculations that describe specific attributes of the image.
Energized Image	The image capturing the energy that is evoked from the finger when the voltage is applied to the plate.
Finger Image	The raw image of the finger captured before the voltage is applied to the plate.
Pixel	A graphical component that has the ability to turn on and off and display color and intensity.

4.0 System Requirements

- ⤴ The system must only be accessible to a user that has a valid User Id and password combination.
- ⤴ Functions within the system must be delegated by role. There will be three roles in the system:
 - ⤴ EPIC User- has access to scan functions only.
 - ⤴ EPIC Administrator- has access to scan functions as well as user administrative functions like the Users functions.

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- ✧ System Administrator- has access to all areas of the ClearView software including Administrative functionality in the Capture, Camera and Report functions.

NOTE: Scan functions include the Manage Patients functions, Capture functions, Camera functions, and the Report functions excluding the Admin Page and all associated functions.

- ✧ The system must close after a specific amount of time of inactivity per HIPPA regulations. The initial amount of time should be 15 minutes. Inactivity is defined as no keyboard input or mouse clicks within the time frame.
- ✧ The system must contain a main menu in order for the user to easily navigate through the application.
- ✧ The system must be windows based and be written using the .net framework.
- ✧ The system must persist data in a Microsoft SQL Server Database, version 2005 or greater.
- ✧ The system must synchronize with an external controlling server. This server will be used to provide authentication for scans, archival functionality for images and other tasks.
- ✧ The system should allow for the creation and management of users. The requirements for this functionality are defined in the User Administration- Requirements document.
- ✧ The system should allow patients to be added and managed. The requirements for this functionality are defined in the Patient Services- Requirements document.
- ✧ The system should allow a calibration process to be performed on the scanning devices. The requirements for this functionality are defined in the Camera Functions- Requirements document.
- ✧ The system should allow for the capture of new images for a patient, as well as the analysis and results reporting for the images. The requirements for this functionality are defined in the Capture Functions- Requirements document.
- ✧ The system should allow historical scans (i.e., patient energized images) and the analysis results (i.e., report displays) to be searched and reviewed by a user.
- ✧ The system should allow the currently logged in user to be changed without requiring a shutdown of the application.
- ✧ The system should display the version number in the upper section of the main page.
- ✧ The system should allow for notifications to the user to be displayed in a noticeable area regardless of the function that is currently being performed.
- ✧ The system should allow the camera settings to be modified and persisted. This can only be done using the "administrator" login. These settings include: (firmware version,



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exposure delay, brightness and gain). Other settings are available, but will be implemented in the next iteration of the firmware.

5.0 Reference Documents

SR-001, Patient Services- Requirements

SR-002, Capture Functions- Requirements

SR-003, Analysis Functions- Requirements

SR-004, Camera Functions- Requirements



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Document Revision History

Version Number:	Description of Change:	Date:	Updated by:
000	Introduction	5/24/11	A. Mason
001	Update to include camera settings requirement.	5/24/11	A. Mason