decimal3D User Guide

for app version 1.10.0

.decimal, LLC. 121 Central Park Place, Sanford, FL. 32771. 1-800-255-1613

Table of Contents

decimal3D Overview

> **App Version: 1.10.1**
> Note: This user guide is intended only for the latest version of the decimal3D App listed above. Please refer to the decimal3D version history for the complete listing of user guides.

decimal3D® is an iPad App, utilizing advanced optical scanning technology that enables the user to capture a full color, dimensionally accurate rendering of a patient's treatment area. decimal3D allows the user to quickly digitize the shape of the physician drawn treatment field and design the required electron aperture. From the App, the user can order the electron aperture from .decimal for next day delivery.

Access and permissions for decimal3D are managed by the .decimal and users can configure machine and address information through .decimal's p.d software.

User Guide

The decimal3D User Guide provides important product labeling information, including Instructions for Use and a Walkthrough Tutorial.

Getting Started Basic setup and overview of the decimal3D App.

Common Tasks Detailed guide of common tasks performed by the user within the application

Instructions For Use

The decimal3D Instructions For Use outlines the intended use and user requirements of using the application and provides important product labeling information which should be read and understood by all application users.

Overview Intended use and indications for use of the application.

User Profile Recommended user education and experience level.

Warning Warning of potential misuse.

Testing Responsibilities Testing responsibilities for ensuring correct setup and configuration of the application.

Product Features High level features of the application.

Known Limitations Known application limitations, defects, or inconsistencies.

Reference Documentation

Dicom Conformance Statement decimal3D Dicom Conformance Statement

DICOM-PS3.3 2020b DICOM Part 3: Information Object Definitions specification.

About

Note: decimal3D is cleared for sale only in the United States

US FDA 510k : K192554

GTIN : 851147007113

Support

For questions, comments, support requests, bug reporting, or to schedule a training session, please contact our customer support team at: 1-800-255-1613
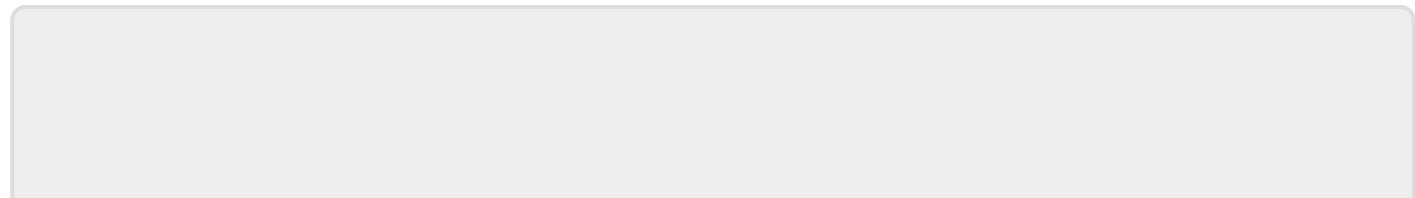

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https://apps.dotdecimal.com/doku.php?id=decimal3d:decimal3d

Last update: **2021/12/08 14:59**

decimal3D User Guide

Overview

The primary purpose and intended use of this device is to improve the efficiency of designing patient specific radiation therapy beam-shaping block devices through the use of optical scanning technology. This device will serve as a direct replacement to the current processes for designing such radiotherapy devices in cases where a "clinical patient set up" is used (i.e. cases where the treatment field is determined by direct physician examination, not by internal imaging technology). One such common current process is for electron therapy clinical setups, which involves hand drawing of the patient-specific aperture shape onto a semi-transparent "template" block, using the treatment light field to verify accuracy against the treatment area that has been outlined directly on a patient by the treating physician. This now flattened and projected aperture shape can then be scanned and digitized allowing for computer controlled fabrication. This new decimal3D device will replace this process by providing a means to accurately scan and digitize the treatment area. After the surface scan is obtained, this device also provides a means for designing and ordering the required devices (e.g. digitization of the field for electron apertures), analogous to the current digitization process in the existing clinical workflow.

This product is not intended to replace CT imaging or other internal imaging modalities and should be used only in cases where a qualified Radiation Oncologist has made appropriate determination of the acceptability of a "clinical patient set up" approach, independent of any information provided by this application. In other words, the role of this product is to simply ensure efficient and accurate ordering of a patient-specific device from our company, in cases where a licensed Radiation Oncologist has predetermined that such a device and treatment approach is appropriate for the patient at hand. Thus this device's indications for use include patients with a variety of cancer and disease conditions, which will be treated under the direct supervision and guidance of a radiation oncologist that has prescribed a desired dose of radiation to be delivered to the patient.

Purpose

The purpose of this document is to provide guidance on the setup, access, and usage of the decimal3D App.

Getting Started

Proper use of this software is critical to safe and effective treatment of patients using devices generated by this application. Users are expected to read and understand this complete User Guide including the Instructions for Use, which outlines the general usage principles and limitations of the decimal3D App. Users must read and understand these instructions before operating the system for clinical use. Refer to each section below for complete details:

Precautions

It is the responsibility of those utilizing this application to ensure all that all usages of this product relating to patient treatments are performed by trained and qualified personnel only and that such personnel is aware that the quality of any generated treatment plans is highly dependent on the quality and correctness of the input data; therefore if any questions or uncertainties exist regarding the quality, units, or identification of input data arise, they must be investigated and resolved before the data are used.

Initial Setup

Your decimal3D App will arrive pre-installed and pre-calibrated on a 7th generation Apple iPad, which has been assembled with a Structure Sensor Mark II (by Occipital). So your decimal3D system will arrive in a ready-to-use state (please refer to the Instructions for Use herein for some additional set up instructions regarding iPad security). Also, please note that after the initial purchase, all hardware concerns, including damage or warranty repairs, should be directed to the appropriate hardware provider.

On first use of decimal3D users are also responsible for confirming the accuracy of machine data using .decimal's p.d App. This data will be used in decimal3D for determining the brand of your linear accelerator, the available electron applicator sizes, and tray location. Users should complete a site survey found at https://dotdecimal.com/site-survey/ if they do not have an account with .decimal and our staff will assist users in setting up machines via p.d.

Network Requirements

decimal3D uses decimal Direct via HTTPS to authenticate users, request machine data, and order patient hardware. This address and port must be open to passive communication with external addresses from the iPad that is running decimal3D. Note that all communication is initiated from decimal3D (i.e., there should be no need to forward ports to the iPad), however, you must ensure that the following address be allowed to communicate with the iPad running decimal3D in order for the application to function properly:

Server URL	direct.dotdecimal.com (64.128.252.104)
Port	443

The

decimal3D RN27

document provides further details about the network requirements, accounts, and data saved and transmitted by the application.

Application Features

The following descriptions are thorough guides providing complete information about each task within the decimal3D application.

- Standard Block Library

Training

While .decimal3D has been designed to be simple and intuitive, live (web-based) training is included with your purchase of the decimal3D application. Please contact our customer service team to schedule a private training session at your convenience.

System Usage

Improper System Usage

When using decimal3D, as with any complex program, there is the potential for misuse. The decimal3D App should be used under the guidance of a physician by authorized users such as physicists, certified medical dosimetrists, radiation therapists, and other licensed clinical staff who have been trained by the .decimal staff or by the clinical staff.

decimal3D allows users to enter custom information (COMP_ID field) that will be engraved onto patient specific devices (e.g. blocks and bolus) to aid in proper identification and usage of our products. Please note however, that PHI and PII should never be entered into these fields, as your devices will be delivered via shipping services that cannot guarantee HIPAA-compliance of the packages throughout the entire shipping and delivery route.

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Last update: **2021/07/29 18:23**

decimal3D Instructions for Use

Overview, Indications for Use, and Intended Use

The primary purpose and intended use of this device is to improve the efficiency of designing patient specific radiation therapy beam-shaping block devices through the use of optical scanning technology. This device will serve as a direct replacement to the current processes for designing such radiotherapy devices in cases where a "clinical patient set up" is used (i.e. cases where the treatment field is determined by direct physician examination, not by internal imaging technology). One such common current process is for electron therapy clinical setups, which involves hand drawing of the patient-specific aperture shape onto a semi-transparent "template" block, using the treatment light field to verify accuracy against the treatment area that has been outlined directly on a patient by the treating physician. This now flattened and projected aperture shape can then be scanned and digitized allowing for computer controlled fabrication. This new decimal3D device will replace this process by providing a means to accurately scan and digitize the treatment area. After the surface scan is obtained, this device also provides a means for designing and ordering the required devices (e.g. digitization of the field for electron apertures), analogous to the current digitization process in the existing clinical workflow.

This product is not intended to replace CT imaging or other internal imaging modalities and should be used only in cases where a qualified Radiation Oncologist has made appropriate determination of the acceptability of a "clinical set up" approach, independent of any information provided by this application. In other words, the role of this product is to simply ensure efficient and accurate ordering of a patient-specific device from our company, in cases where a licensed Radiation Oncologist has predetermined that such a device and treatment approach is appropriate for the patient at hand. Thus this device's indications for use include patients with a variety of cancer and disease conditions, which will be treated under the direct supervision and guidance of a radiation oncologist that has prescribed a desired dose of radiation to be delivered to the patient.

User Responsibilities

It is the user's responsibility to test each device ordered through decimal3D for proper function, fit, and clinical acceptability **prior to use on a patient**. The user must also agree to the *Terms and Conditions* as well as the *Processing Agreement* prior to ordering a device for patient use.

Clinical Safety

It is the responsibility of the user to perform end-to-end testing prior to the clinical use of decimal3D. The user should follow accepted industry guideline and clinical experience for the end-to-end testing. This testing should be performed by qualified personnel and should ensure (at a minimum) that users are able to scan, digitize, and order an electron block that meets or exceeds the clinical accuracy as compared to the clinic's current process for clinical electron set ups.

It is the responsibility of the facility to ensure that all users of the decimal3D have had training on the decimal3D App and possess the appropriate clinical education and experience to properly use the application.

Warning

It is critical that all users read these Instructions for Use and the User Guide material carefully and completely and consult the provided User Guides and other training materials to ensure proper use of the application.

> ⚠️ Prior to the delivery of any treatment on a patient, users are responsible for performing patient specific QA to ensure clinical acceptability of the delivered treatment device. Since users are responsible for testing the acceptability of the delivered dose before treatment, .decimal, its staff, and representatives shall not be liable for any mis-treatments that may result from use of its software or devices.

Caution: Federal law restricts this device to sale by or on the order of a physician.

User Profile

The decimal3D App should be used under the guidance of a physician by authorized users such as physicists, certified medical dosimetrists, radiation therapists, and other licensed clinical staff who have been trained by the .decimal staff or by the clinical staff.

Product Features

decimal3D is a medical software accessed on an iPad and managed through the Apple App Store® (users must create an account with Apple to manage their iPad software installations). decimal3D allows users to enter standard patient information, capture a three dimensional scan of the physician drawn treatment area, digitize the exact shape of the treatment field, and place a beam to complete the design of a patient-specific electron aperture. The decimal3D App also allows the user to order the aperture for fabrication and delivery by .decimal. Ordered Treatment Devices can also be exported to R&V and other software systems via the built in DICOM file sender. Additional patient data, such as Patient Setup photos, can be exported via the patient's profile screen.

Application Features

The following descriptions are thorough guides providing complete information about each task within the decimal3D application.

- Standard Block Library

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System Availability and Data Integrity

The decimal3D App is installed on a standard Apple iPad and uses the Structure Sensor Mark II by Occipital. These off-the-shelf hardware components are covered by manufacture warranties, which can be extended to ensure continuous support and service for all components of the decimal3D system. All system data is stored locally on the iPad using secure encryption technology. As this application stores patient protected health information (PHI), clinics should secure the iPad following their internal Mobile Device protection policies to ensure protection of patient data and maintain HIPAA compliance. Remote tracking and lockout software is highly recommended to ensure the iPad data can be locked, deleted, and recovered in the event an iPad is lost or stolen.

It should be noted however, that decimal3D nor its host iPad should be used as the sole location to store critical patient treatment record information. As a mobile device, iPads can be prone to potential loss or damage. Once an order has been placed however, .decimal securely stores the treatment device information on its servers for the time period required by the US FDA and users may request this information, if necessary, in the event of local data loss. As such, users should take care to digitize and place orders in a timely fashion and transfer ordered treatment device data from decimal3D to the appropriate patient record database via our DICOM export feature on a regular basis.

Coordinates and Units of Measure

The following is a list of several important items that users should understand in regards to the information displays in the decimal3D Application:

- All linear dimensions are shown in centimeters (cm)
- All angular dimensions are shown in degrees (deg)
- All date/time values are provided in a *mm/dd/yyyy h:m:s am/pm* format using local time
- All date and time information should match current iOS date and time, including proper use of daylight savings time where appropriate (note: decimal3D will display in am/pm format, while iOS may display in 24 hr format depending on local settings)

Data Validation

Users are responsible for confirming the accuracy of machine data using decimal's p.d App. This data will be used in decimal3D for determining available electron applicator sizes and tray locations. Users should complete a site survey found at https://dotdecimal.com/site-survey/ if they do not have an account with

.decimal. .decimal staff will aid users in setting up machines.

Unauthorized Use and Access Control

decimal3D will contain sensitive patient information that is protected under various governmental regulations, therefore users must ensure they adequately follow all appropriate and applicable rules regarding how, where, and when their staff may access the application and its data. Since all application and data access requires user login credentials, it is important that site administrators implement a strong password policy and that all users understand the importance of maintaining secrecy of their password (i.e. passwords should never be shared among more than one user). It is these user credentials that protect the system and its data from unauthorized access and replication. Please note that in addition to the iPad passcode or biometric access protections, decimal3D requires a separate user-specific login to ensure that all PHI is protected by non-shared access account credentials.

System Calibration

The decimal3D application relies on both the Structure Sensor Mark II and built-in iPad color camera. Proper operation of the decimal3D App requires that these two components be properly calibrated to ensure accurate alignment of scanned image colorization. A calibrator app has been provided with your iPad and the system is shipped pre-calibrated. However, part of the regular maintenance of the decimal3D application is for users to verify and adjust the calibration every 6 months OR anytime the Mark II Sensor is removed from the iPad OR anytime the system is subjected to an impact (e.g. fall or drop) that may have jarred or shifted the Sensor. The calibration procedure is simple and the provided calibrator app walks users through adjusting and testing the system's calibration.

Patient Data Export

The decimal3D application provides multiple ways to export patient data for other systems. Ordered treatment devices may be exported to R&V as well as other external software using the DICOM share functionality on a selected scan. This functionality requires a hostname and port to be provided in the Advanced Settings screen of the application.

Additionally, Patient Setup photos may be taken, managed and exported via any patient detail screen. The gallery of images can be saved to external devices (ex: SD cards) using the Files application available on all iPads and a Lightning to SD Card or USB-C to SD Card adapter (for iPad pro devices).

In both cases, caution should be taken that proper destinations are selected to protect patient data.

Known Limitations

Below are listed the known application limitations, defects, or inconsistencies.

1. Site information including Machine and Address Settings cannot be edited from decimal3D (these can be edited using .decimal's p.d software available on Windows computers)
2. User passwords cannot be changed within the decimal3D App (please log in to direct.dotdecimal.com to change your password or contact .decimal customer service to request a password reset)
3. Patient Databases are stored locally on each iPad, so facilities with more than one iPad will not be able to access all patient records from each iPad (note: once an Order is place however, the order information is available via direct.dotdecimal.com, which can be accessed from any device or computer)
4. Scans are able to be deleted even if they contain contours and beams, so care should be exercised whenever deleting scans as all data associated with that scan will also be deleted
5. Very bright indoor lighting can interfere with scanning, especially on dark or shiny surfaces; if you experience difficulty with the scanner recognizing a surface, try scanning in a lower light condition
6. Long term application use without an application restart can produce errors where scans fail to render in the display; the app should be closed fully and restarted to correct the issue
7. Any unsaved changes will be lost if the application logs out the user due to 10 minutes of inactivity (however, changes may appear saved if the application is not fully restarted).
8. Existing patients created in older versions of the application may not show patient name in all UI fields (data is not lost, but is not visible on all screens).

For the release notes for each version of the decimal3D Application, please refer to decimal3D Version History.

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decimal3D Version History

This section is intended to provide access to previous versions of the decimal3D userguide documentation. Below you will find the userguide for each released version of the decimal3D App. To find your application's current version open the "Advanced" page from the left side menu.

User Guide information is directly available on this website and a PDF is provided for offline user guide access with each version below.

Release Notes

decimal3D 1.10.1 (Build 101)

December 10, 2021 -

Download the decimal3D 1.9.1 User Guide
(no User Guide Changes are associated this release)

What's New

- Added a new application setting to specify the DICOM Applicator Export Format:
    - Numeric (e.g. 10×10)
    - ARIA Format (e.g. A10)
    - No Applicator Output

Bug Fixes

- Fixed the Auth0 login not defaulting to the Live production system and using the Test login.

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decimal3D 1.10.0 (Build 96)

October 12, 2021 -

Download the decimal3D 1.9.1 User Guide
(no User Guide Changes are associated this release)

What's New

- Added support for Auth0 Log In:

- Users added through decimal Direct with decimal3D permissions are capable of logging in via Auth0.
- decimal3D will automatically check if a user is an Auth0 or legacy account and log you in accordingly.
- decimal3D now pulls ordering addresses from decimal Direct. If the address is not present in decimal Direct then decimal3D will fall back to using the p.d machine address.
- Removed the ability to log in offline.
- Added a registered trademark insignia to decimal3D logos.
- Added the ability to put hyphens in the patient's MRN.

Bug Fixes

- Fixed a bug where editing a patient avatar would not replace the old one, resulting in the old one usually remaining displayed.
- Fixed issue where the log in buttons and text boxes would be covered by the keyboard.

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decimal3D 1.9.1 (Build 91)

July 28, 2021 -

Download the decimal3D 1.9.1 User Guide

What's New

- Updated DICOM RT Plan output to include Applicator Sequence and generic Prescription/Dose Reference fields to improve R&V compatibility
- Added Advanced Setting to allow users to turn on automatic filling of billing PO numbers
- Various minor bug fixes and usability improvements are also included

Bug Fixes

- Fixed a bug that prevented the existing entry point from being re-used when editing a beam

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decimal3D 1.9.0 (Build 87)

June 21, 2021 -

Download the decimal3D 1.9.0 User Guide

What's New

- Added support for using a Library of Standard cutout shapes
  - Patient-specific blocks can be compared to a known library of "standards" and scored for fit
  - Users can select and order standard shape blocks when appropriate

Bug Fixes

- Completing a scan no longer directs you straight into contour creation
- Fixed error causing front-facing camera photos to appear inverted
- Added better error message for expired passwords
- Fixed an issue that allowed rotation of BEV
- Disabled contour and beam creation until a treatment machine has been selected
    - This prevents the user from reaching several types of invalid application states
    - Also added treatment machine name under the scan title to improve visibility

decimal3D 1.8.0 (Build 58)

April 7, 2021 -

Download the decimal3D 1.8.0 User Guide

What's New

- Communication performance improvements for login and ordering

Bug Fixes

- Fixes an error with the Gender tag in exported DICOM Plan files
- General performance improvements and bug fixes

decimal3D 1.7.0 (Build 53)

March 1, 2021 -

Download the decimal3D 1.7.0 User Guide

What's New

- Source-to-Skin (SSD) values can now be set to tenths of centimeters instead of only whole centimeters

Bug Fixes

- Includes a fix for DICOM exports with receivers expecting a RTPlan presentation context
- General performance improvements and bug fixes

decimal3D 1.6.1 (Build 42)

November 16, 2020 -

Download the decimal3D 1.6.0 User Guide

(no User Changes are associated this release)

What's New

- This release includes updates to support iOS v14 and the Occipital SDK v1.0.
- Additionally, the DICOM export now provides improved status messages.

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decimal3D 1.6.0 (Build 39)

September 4, 2020 -

Download decimal3D 1.6.0 User Guide

What's New

- This release contains a new feature allowing user's to take, manage and export patient setup photos. This feature can be accessed from any patient profile page.

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decimal3D 1.5.0 (Build 36)

August 10, 2020 -

Download decimal3D 1.5.0 User Guide

What's New

- Supports Occipital Structure Mark II 1.0 firmware (Use the Structure app to update your Mark II device)

Bug Fixes

- MRN can now be entered with leading zeroes
- Minor UX enhancements

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decimal3D 1.4.0 (Build 35)

Download decimal3D 1.4.0 User Guide

What's New

- *Send* button added to scans with ordered devices allowing DICOM RT Plan files to be sent to a remote receiver

Bug Fixes

- Patient Name fields split out into First, Middle, and Last
- Restyled the *Advanced* page and added DICOM Receiver configuration data

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decimal3D 1.3.0 (Build 28)

Download decimal3D 1.3.0 User Guide

This is a minor release focused on usability enhancements. The most notable addition is this release is the incorporation of machine parameters to allow displays to use the local user's equipment angle settings within the application (top item below). Additional items of note are included below:

What's New

- Machine definitions now read rotation direction and reference positions for gantry, couch, and collimator rotations (i.e. IEC or vendor-specific equipment configurations are now supported)
- Several confirmations were added in cases where the attempted action may result in loss of unsaved data (e.g. cancelling a beam edit or discarding a scan)
- iPad App orientation is locked to landscape right to prevent unexpected scanning behavior on screen rotation

Bug Fixes

- Scan "Align" button now changes to "Realign" after the first click
- Zoom levels for 3D and BEV were separated to allow for independent setting of each

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decimal3D 1.2.0 (Build 25)

Download decimal3D 1.2.0 User Guide

What's New

- Added couch angle calculation when defining the initial beam entry position
- Added millability enforcement to cutout shapes and warnings to users when 1.5mm or greater deviations are found
- Reduced contour drawing "dwell times" to improve usability and fixed some bugs with undo/redo
- Added the SiteID to the Order Page
- Added an additional "edit scan" button to the Scan Details view
- Removed emoji keyboard options when adding/editing patient information

Bug Fixes

- Increased spinner sizes and spacings, and added "wrap around" support to improve usability of beam editing
- Updated DOB spinner default and allow forward dates (but warn on save attempt as this greatly improves usability)
- Fixed keyboard positioning to prevent covering of input controls on certain pages
- Fixed a bug where hitting cancel on the beam Save confirmation would close the beam task, thereby deleting user changes
- Fixed errors with allowable block size determination and potential saving of the wrong block size and app crashing
- Changed crosshair color and line thickness

decimal3D 1.1.0 (Build 20)

January 28, 2020

Download decimal3D 1.1.0 User Guide

This version was the first release intended for clinical use.

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Last update: **2021/12/13 13:50**

Electron Block Walk-through Tutorial

This walk-through is intended to be an easy to follow step-by-step guide for completing a "standard clinical electron" set-up. It covers all steps involved in designing and ordering an electron aperture from .decimal. The intent is that after completing this walk-through you will have gained the knowledge and understanding necessary to complete a clinical electron set up utilizing the decimal3D App (it should be noted that the values provided herein are not intended to represent clinical guidelines and should in no way be considered a recommendation for values that are appropriate for clinical use).

1. Have the physician outline the desired treatment area on the patient's skin using a marker or pen with high color contrast
2. Bring the patient to the simulator or treatment room and place them in the desired treatment position
3. Open the decimal3D app on the iPad and login with your unique username and password. The username and password is the same as what is used to sign in to p.d.

4. Select *New Patient* in the top right hand of the Patient Management Screen
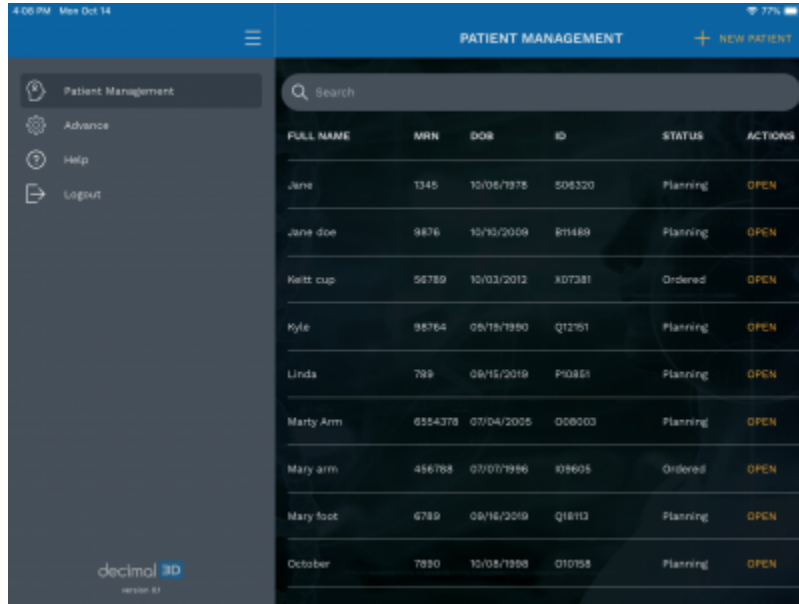
5. Enter the *Patient Name*
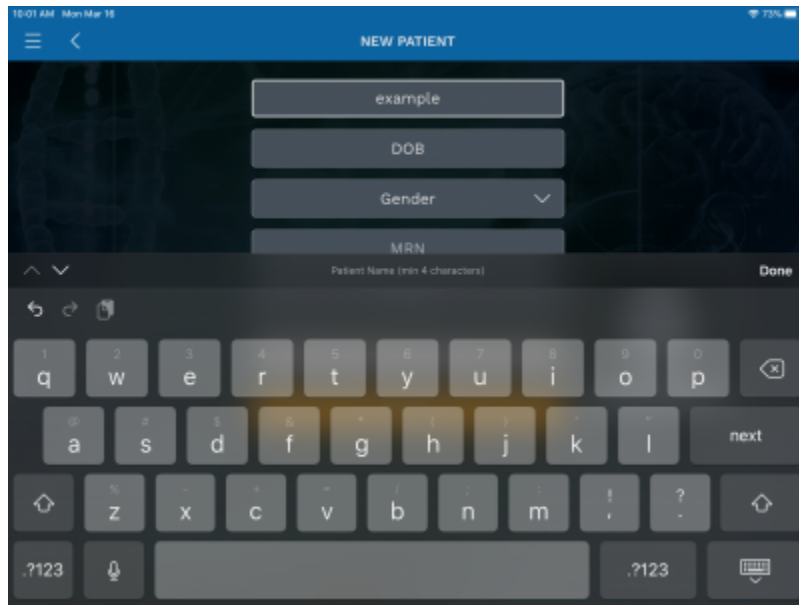
6. Enter the *Date of Birth*
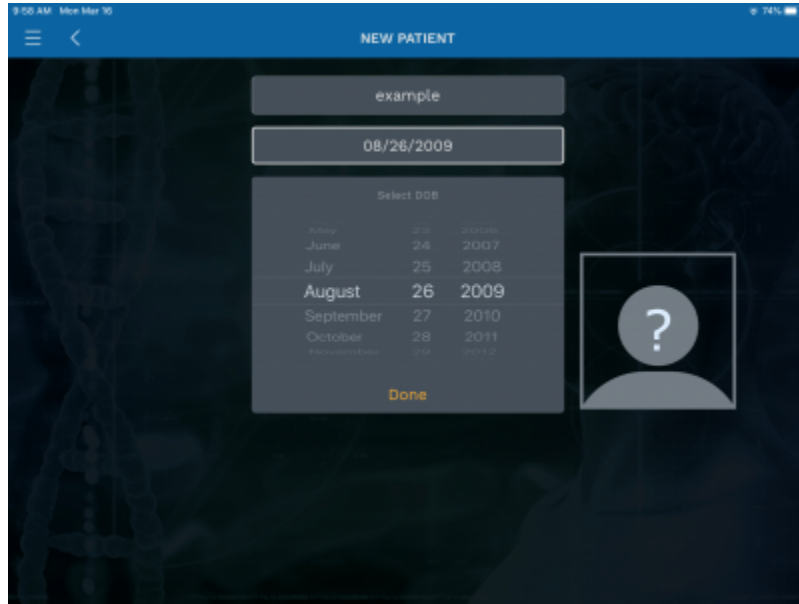
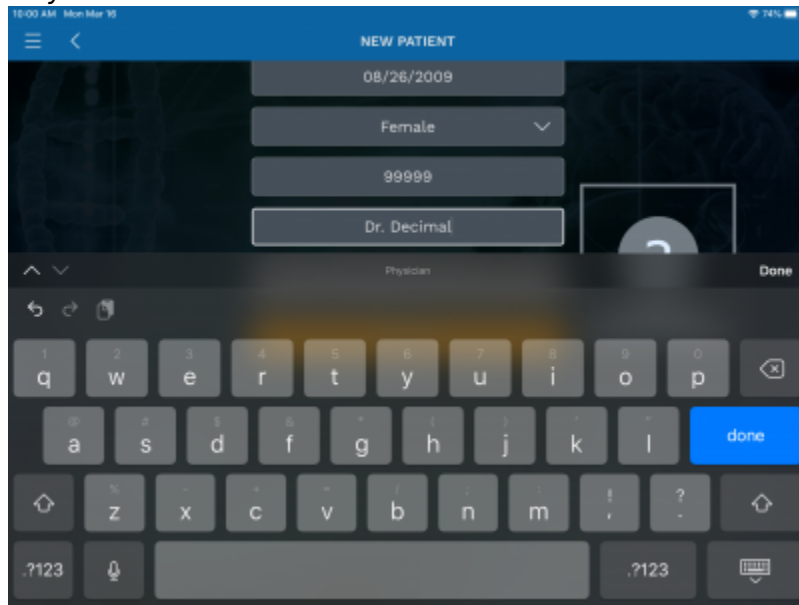7. Select the patient *Gender* from drop down
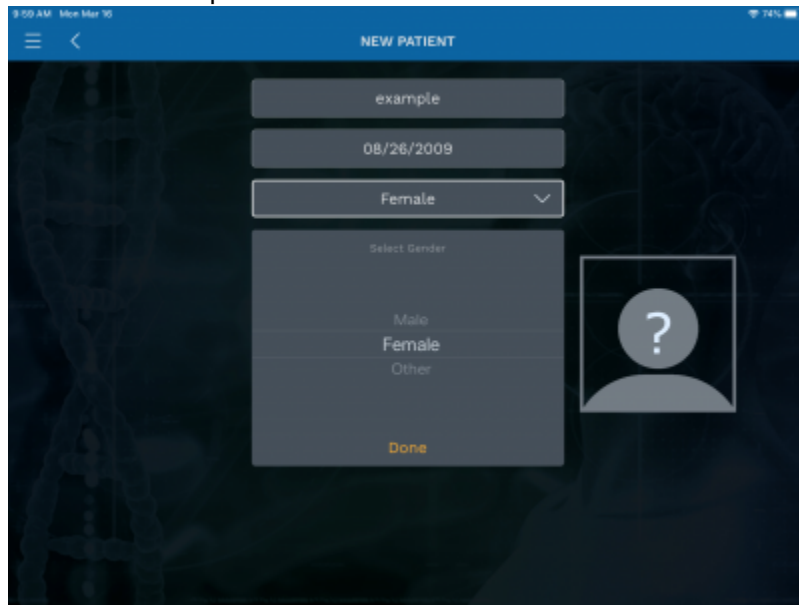
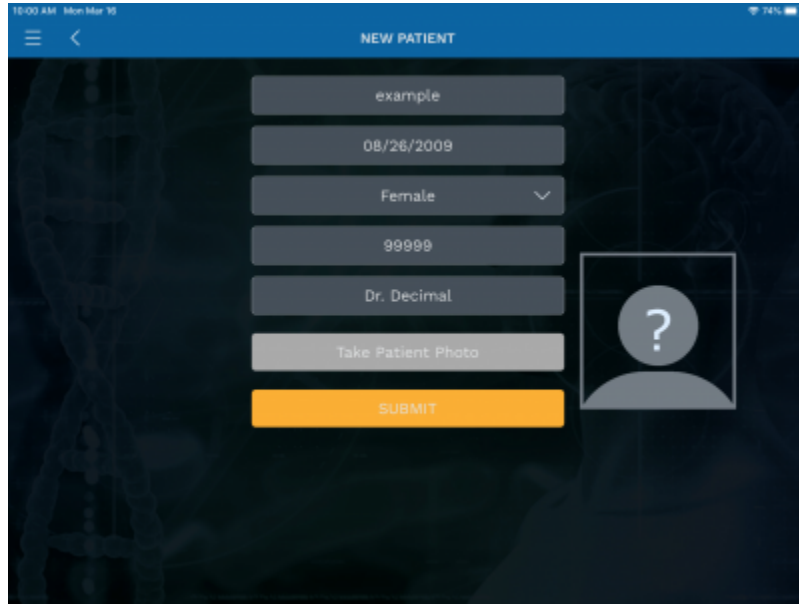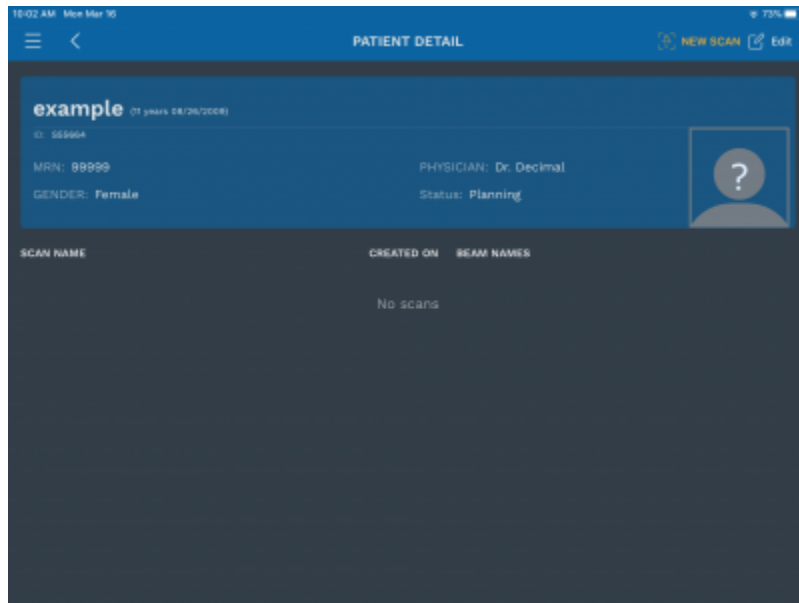8. Enter the *MRN* (Medical Record Number)
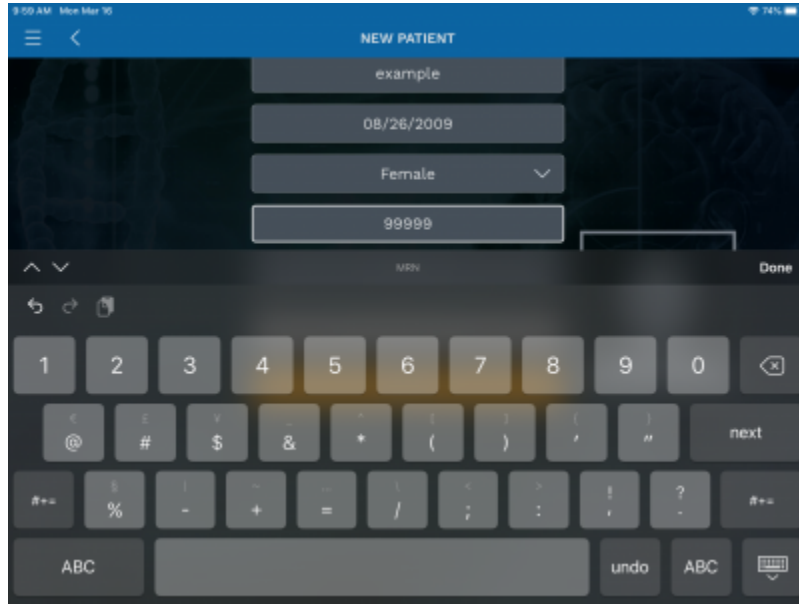
9. If desired, enter the *Physician* name

10. Press *Submit* and the patient record will be created

11. In the top right hand corner select *New Scan*

    1. Before starting the scan, you must align the iPad to the treatment table so that couch and gantry angles can be accurately determined

    2. To perform this alignment, simply hold the iPad against the edge of the treatment table (with the gantry toward YOUR LEFT and the iPad parallel to the floor) and press the *Align* button as

shown in the images below
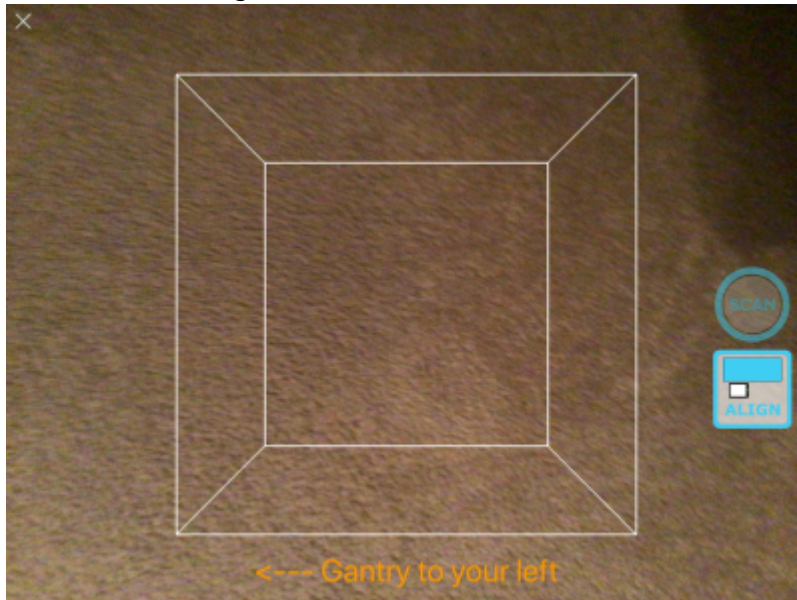
3. You are now ready to scan the patient. Focus the scanner on the area to be scanned. Adjust your distance from the patient to ensure the entire area to be scanned appears in RED (red indicates an ideal scan distance, yellow is slightly too far away, and if no color is shown, you are too close to the patient). The ideal distance is about half a meter (18 to 24 inches).

4. The box shown in the app can also be adjusted to control the size of the area to be scanned. Only areas fully within the box will be captured during the scan, so you can use a two-finger pinch to shrink or expand the box as needed for the field size at hand.

5. Once you are correctly positioned, press the *Scan* button to begin capturing data.
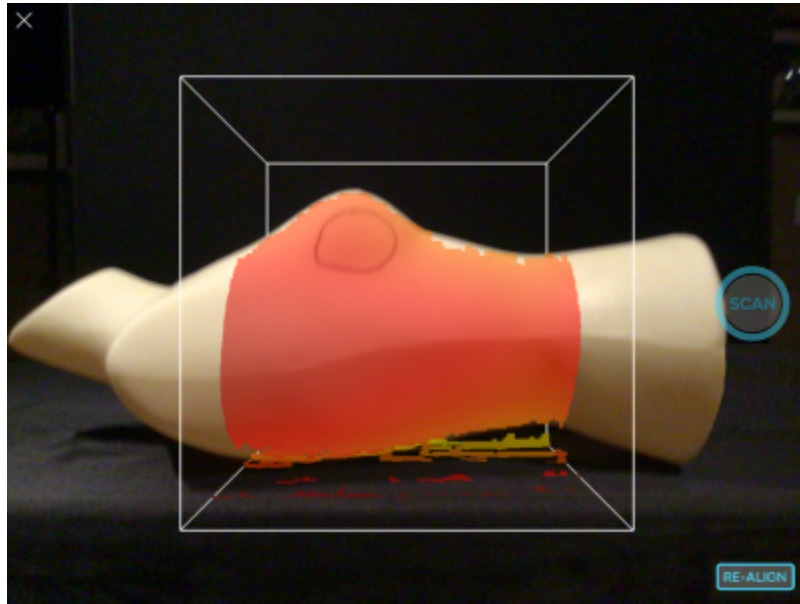
6. While the scan is active, the area that has been fully captured will appear white. You should continue scanning until the entire desired area is shown in white. For relatively smooth or flat areas, the scan can be obtained within 1-2 seconds without moving the iPad, but for larger or highly curved areas, you may need to slowly move or rotate the iPad to capture the entire patient surface.
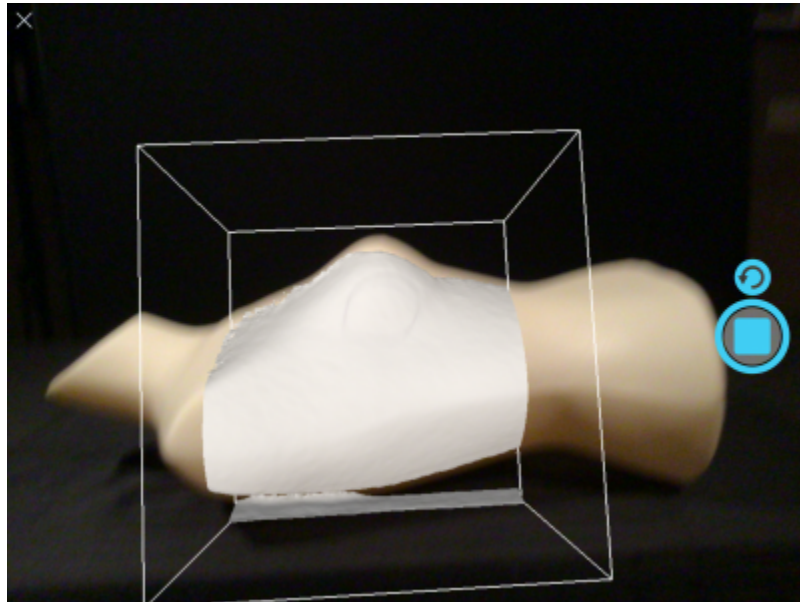
7. Press the *Scan* button again to complete the scan.
    1. The decimal3D app now automatically begins processing the scan depth and color data to produce the colorized 3D model
12. Once the scan is done processing review the resulting model
   1. If the scan is acceptable select *Accept Scan*
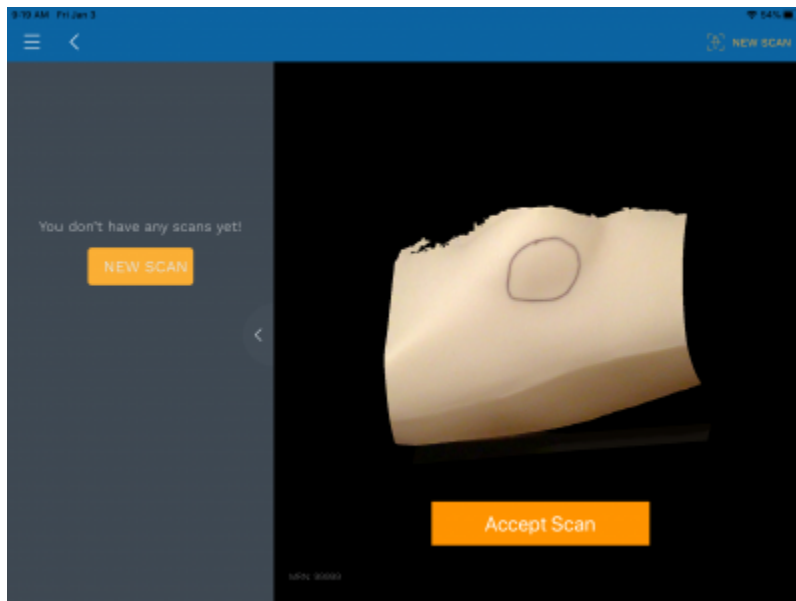
2. If it the scan is not acceptable select *New Scan* button on the left-hand side to discard this scan and start a new scan

13. Choose the desired treatment machine from the scroll selector and edit the name of the scan if desired (by default scans are labeled with sequential numbers, e.g. *Scan 1*). Scan names are used only as a convenience for users to locate scans within a patient and are not used for any other purpose in the application. Press *Submit* when done.
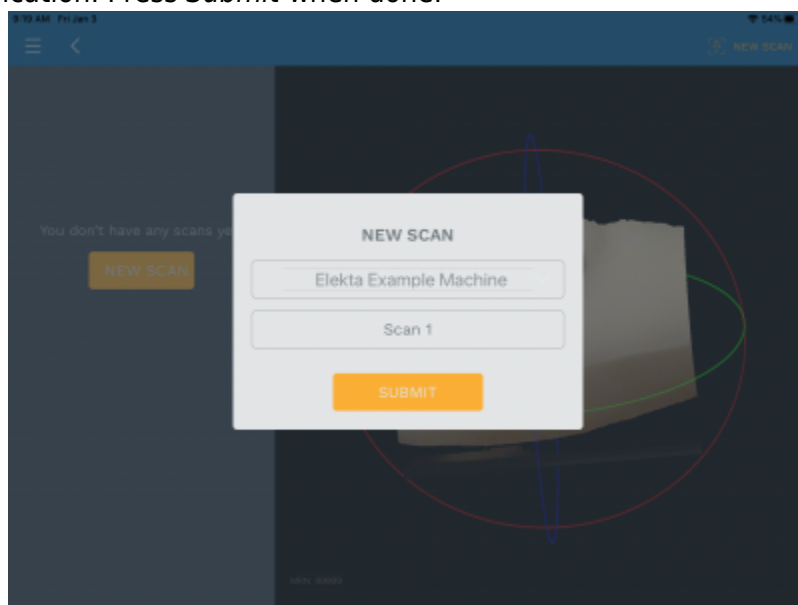

14. Your scan is now saved and you are ready to digitize the treatment field
15. Select *New Contour*
16. You should now rotate, pan, and zoom the display to provide a good view of the treatment field
    1. Rotate by using a single finger drag in any direction
    2. Pan by using a two finger drag in any direction
    3. Zoom by using a two finger pinch motion anywhere in the display
17. Now you will trace the physician drawn treatment field directly on the 3D patient model using either the Apple Pencil or your finger
    1. To start drawing dwell on the scanned image at the desired start point for a full second, then continue drawing the entire treatment area as a single closed contour. Continue drawing until the contour is closed back at the original start point (the contour will change colors to

indicate it is now complete). If you lift the pencil/finger before closing the contour you can continue by dwelling again for one full second at a point near where you left off with the previous drawing and then continuing onward.
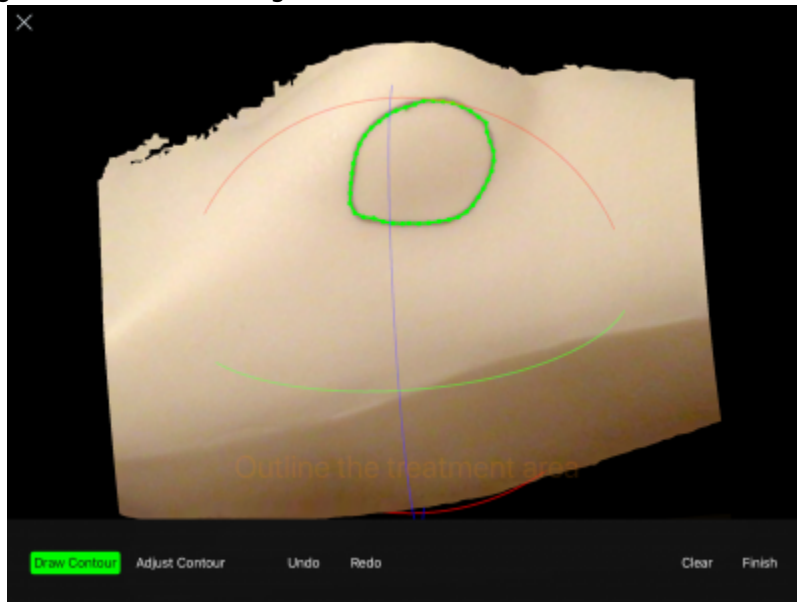

2. Once you have closed the contour, the application will automatically switch to the *Adjust Contour* mode. In this mode you can move points by placing the Apple Pencil or finger on a point, dwelling for one second, and then sliding it to a new position. There are also tools to undo edits and clear all to start again if needed.
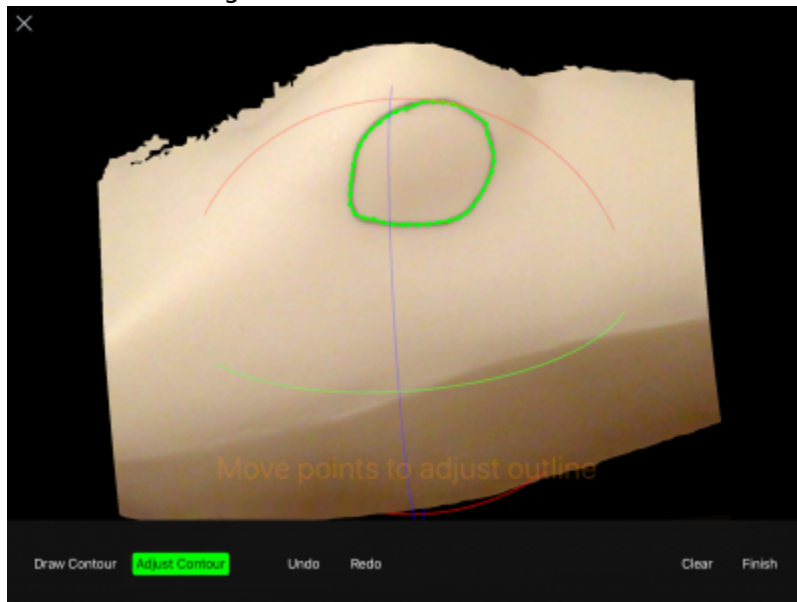

3. Once you're satisfied with the contour select the *Finish* button. Provide a name for the contour (or leave the name at the default) then press *Submit* to save the contour.

18. You are now ready to create your electron aperture by specifying the treatment beam parameters (the application will automatically enter the beam creation task when the contour is completed).

19. The first step in defining the beam is to select the contours to use for the aperture projection (note the contour is automatically selected when this task is started). Press the *Next* button to accept the contour selection.
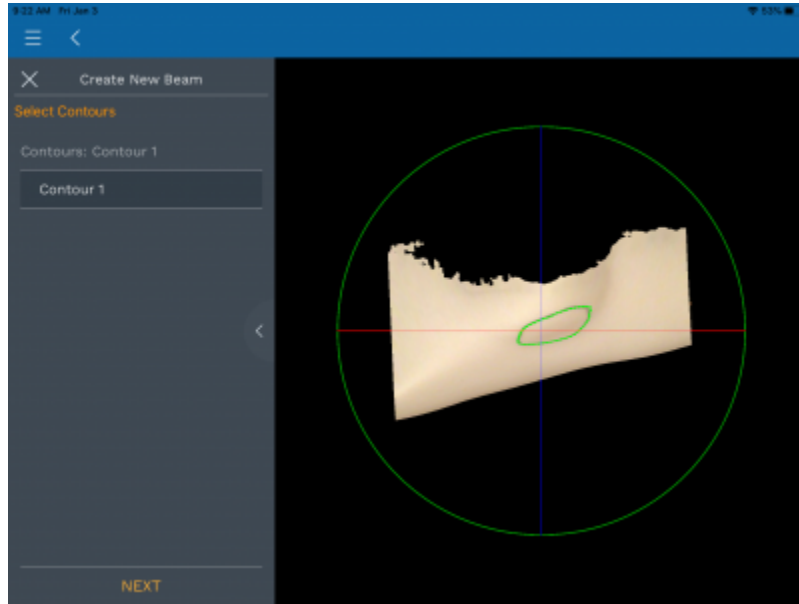
20. Now you will set the beam entry point by tapping on the patient model at the desired location. Tap again to change the location if needed, then press *Next* to accept this position
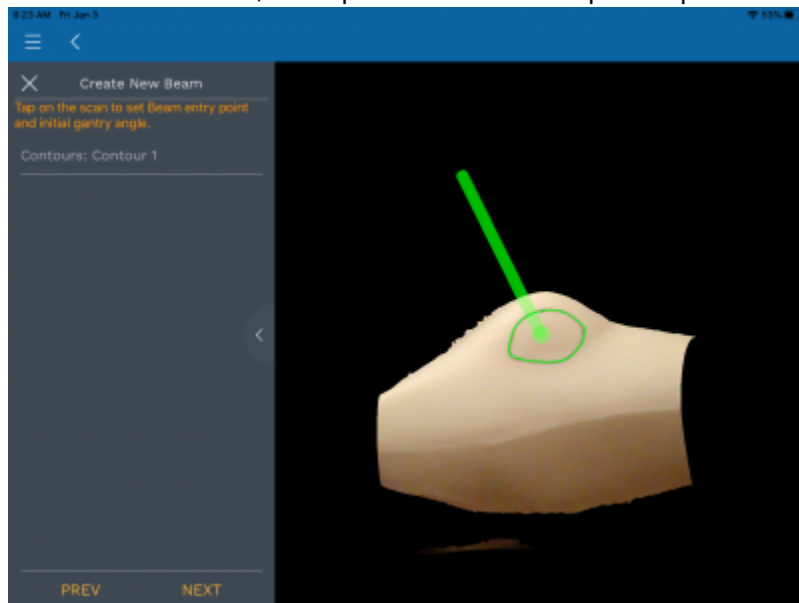

21. You are now presented with all the remaining parameters needed to fully define the desired treatment beam.
    1. These include: SSD, Applicator Size, Gantry Angle, Couch Angle, and Collimator Angle (note: as of v1.7 SSD now includes a second input that allows SSD setting to 0.1cm resolution)
    2. Adjust the parameters as needed to meet the clinical needs of the patient at hand.
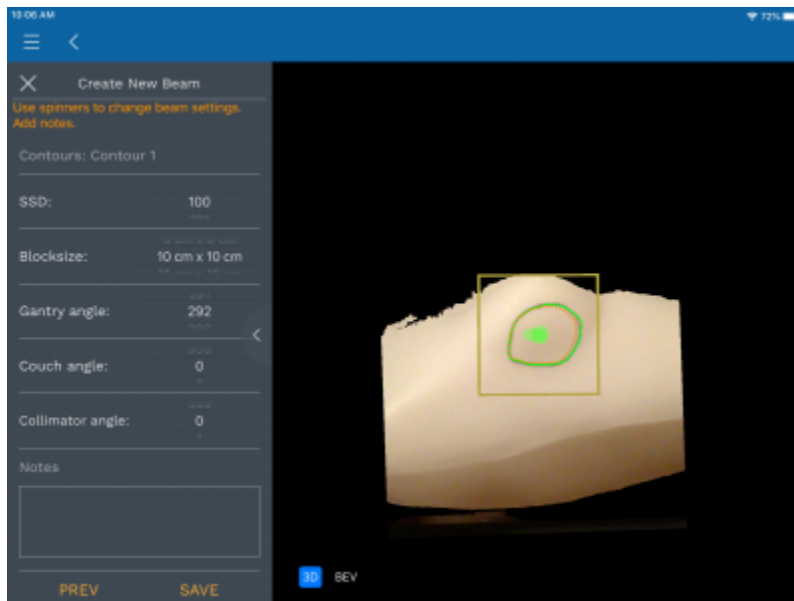
1. You may also wish to rotate the model to ensure an appropriate treatment angle has been selected (and to check for possible collisions of the applicator with the patient). You can also switch to a Beam's Eye View (BEV) where you can view and measure the block shape (note the BEV shape is projected to the isocenter plane).
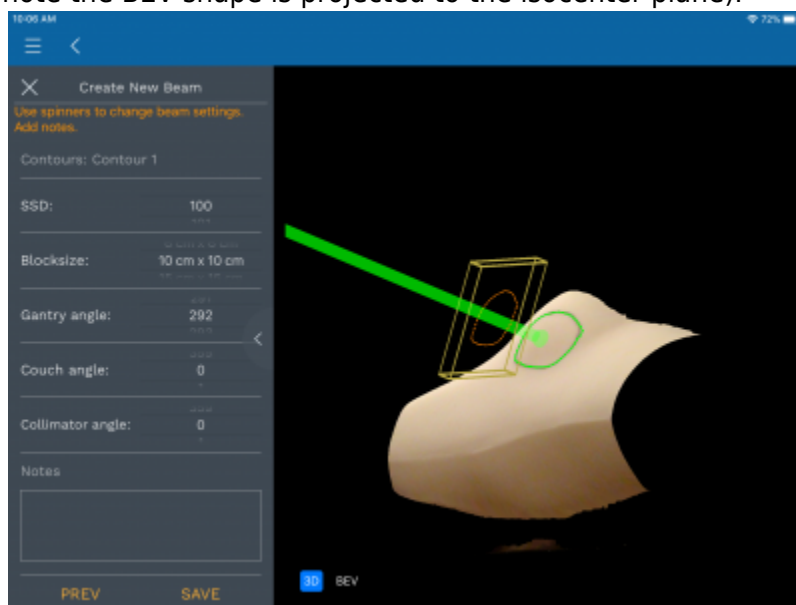
3. Once you're satisfied with the beam and block (cutout) press the *Save* button. You will be prompted for a beam name. This name will be engraved on the actual cutout during manufacturing, therefore you should provide a meaningful beam name before pressing *Submit*.

22. You are now ready to order the cutout by pressing *Order* in the top right hand corner.
    1. All available cutouts are automatically selected for ordering and the engraving data for each cutout is shown at the top of the order page.
    2. Select a shipping priority, review the Shipping and Billing Address information, and press *Order* to securely transmit your order information to .decimal for the cutout to be manufactured.
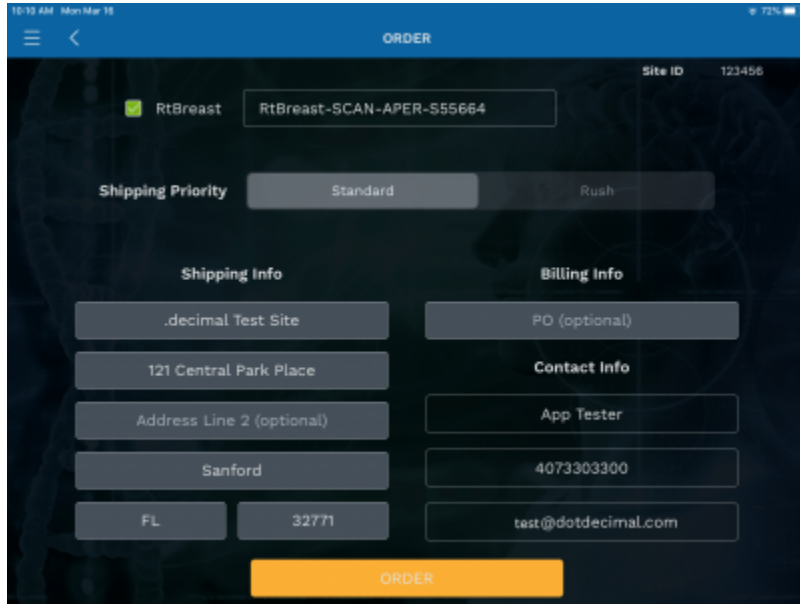
3. Wait for 30-60 seconds to receive a confirmation of successful order.

23. Once your order has been placed, the DICOM Export option will become available. Simply click the "Send" icon in the top right corner (see red circle below) and your treatment device information will be sent to your preconfigured DICOM receiver via a DICOM RT Plan file.

24. If you encounter any difficulties or problems contact our customer service team at 1.800.255.1613

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