



**SMART STAT
PATIENT SIMULATOR
INSTRUCTIONS FOR CARE AND USE**

Thank you for purchasing Simulaids' SMART STAT. We are pleased to bring you the latest in patient simulator technology with this wireless, battery operated, self-contained unit operated with an iPad® and router with Bluetooth™ communication.

The intent of this document is to familiarize you with the basic operation and care of your SMART STAT. You will be able to immediately start using this unit by following a few simple steps. These steps include installing the needed programming on your iPad® available now at the App Store; just search for SMARTSTAT.

It is recommend that you make note of, and store in a convenient location, your manikin's serial number, the invoice date, invoice number, and company (Simulaids' distributor) you purchased from. These three pieces of information are required for any warranty issues. When you have questions concerning the product, don't hesitate to call your qualified distributor sales representative, or Simulaids' Customer Service Department at 800-431-4310.

The SMART STAT patient simulator is intended to be used in various environmental locations for training of emergency medical personnel. All disciplines of training can be administered to this patient simulator, including: physicians, nurses, combat medics, ALS, and BLS providers.

The lung, heart and abdominal sounds associated with the SMART STAT patient simulator are used under license from Cardionics of Webster, TX, and are not to be used for any commercial purpose outside the context of the SMART STAT patient simulator programming.

table of contents

What you received	4
Clothing size	4
What you need	5
Charging batteries	5
Leg assembly	6
Blood simulated, mixing	6
Fluid ports, filling	7
Fluid reservoirs, filling	7~8
CO2 cartridge	9~10
ECG monitoring/defibrillation, set up	10~11
Blood pressure cuff, set up	11
Chest tube, set up	12
External jugular vein, set up	12
Microphone head, set up	12
Pulse ox, set up	13
Bleeding moulages, arm & leg	13~14
Intraosseous leg	14
SMART STAT & iPad®, connection	15-19
Sim Vitals 5-Line Hospital Monitor, installation	20-23
Sim Vitals 5-Line Hospital Monitor, starting	24-26
SMART STAT App, initialize	27-29
Presets, defaults	30-33
On the fly operation	34
Student list	35
Skill list	36
Medication list	37
Scenario, view & create	37-40
Lung/CNS/Airway screen	41
Heart & Lung screen	42
Simulator defaults	43
ECG rates	44
Session/Recording scenario	45-46
Recordings, view, print & save	47
Recordings, retrieving from iTunes®	48-50
Manikin Data Editor, exporting	50
SMART STAT, running simulator	51-52
Care and cleaning	53
Fluid, emptying ports and reservoirs	53
Blood, removing	54
Caution	54
Parts, replacement	55
Trouble shooting	56-57
Warranty	57
Return policy	58
Glossary of terms	58

What you received

SMART STAT Patient Simulator
 SMART STAT programmed Router (includes power cord and network cable)
 Bluetooth™ USB Adapter
 Battery Charger
 Shorts with Simulaids' Logo
 WV IV Pro device (eliminates the use of tape at the IV site)
 Female and Male Genitalia
 SMART STAT B/P Cuff
 SMART STAT Pulse Oximeter
 Chest Post Adapter Set of Two
 Manual Defibrillator Adaptors Set of Two
 Laerdal Adapters Set of Two
 Marquette Adapters Set of Two
 Physio Adapters Set of Two
 Wireless Microphone
 Syringe for Fluid Reservoirs
 Mixing Bottles for Fluids
 SMART STAT DVD
 Instructions for Care and Use

Consumables:

Cricothyrotomy Neck Skins,
 Drain Tube (for Veins)
 FAST1™ Replacement Discs
 Tension Pneumothorax Pads
 IM Injection Sites (Arm and Leg)
 Replacement Teeth
 Pericardiocentesis Replacement Skins (2 Sites)
 Airway Lubrication Kit
 Blood Powder
 Reservoir Bags

Options available with SMART STAT purchase

SimVitals 5-line Hospital Monitor with Laptop No. 410 Wi-Fi
 Amputated Bleeding Leg No. 408
 I/O Leg No. 409
 Amputated Bleeding Arm No. 468
 Xtreme Bleeding Arm No. 481
 Xtreme Bleeding Leg No. 482
 Xtreme Trauma Arm No. 642

To assemble a variety of clothing (not included) to fit the manikin see the sizing chart for information.

Sizing Chart	Torso Length	Sleeve Length	Chest Size	In Seam	Waist	Head Cir.	Neck	Height	Foot Length	Shoe Size
SMART STAT SIMULATOR	18"	34"	46"	32"	40"	26"	18.5"	72"	10"	13
Metric equivalents in cm	46	87	118	82	102	66	47	183	25	men's

What you need

iPad® 2 or Newer

iTunes® Account

Computer for maintaining and printing student records

Defibrillator Cables, which match the manufacturers' lead connectors, 1 set FREE with your SMART STAT purchase.

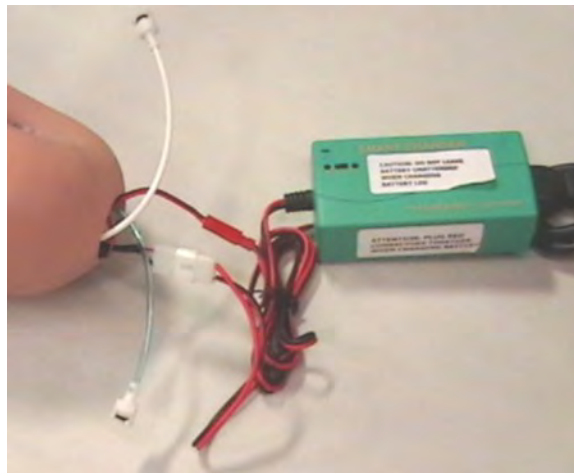
Product set up

Simulaids' authorized SMART STAT distributors (who you purchased your SMART STAT from) are available to assist you with the set up.

Charging the battery

The batteries require approximately five (5) hours of charging. Before installing the leg on the manikin fully charge the battery, which is concealed in the lower left leg. The battery is not removable from the leg.

There are two connections necessary to charge the battery between the leg and the charger. One large connector charges the batteries and the smaller connector is a heat sensor.

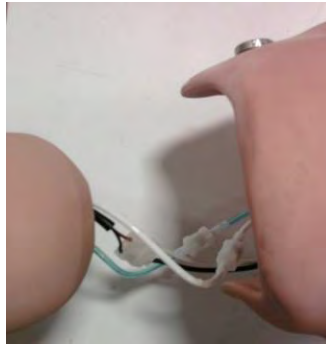


Battery Charger and connections (2)

1. **Always plug in the heat sensor first.** Failure to connect the heat sensor to the charger may result in a fire hazard
2. Connect the power charge connector
3. Place the battery leg on a surface until the batteries are fully charged. The light on the charger will turn green when the charging is complete.

The battery charge will last approximately 5 hours while the simulator is idling at default features. NOTE: When operating the simulator on a/c electrical power, it is recommended to separate the battery leg connector at the knee joint so the battery leg. When the battery reaches an expired level of energy, the simulator will automatically shut down. To preserve the active functions of the simulator plug into the 110 or 240 a/c source before the battery dies. The plug for your extension cord is found inside the pelvic shorts on the right hand side of the simulator. To increase battery time it is recommended to obtain an extra “battery leg” no. 407N.

Leg Assembly



1. Connect the matching colored wires and tubing
2. Check all the connectors to ensure they are securely seated, so the wires do not separate
3. Push the excess wiring into the thigh, as not to encumber the knee joint
4. Secure with the knee pin

Right thigh connectors.



The black cord connects to the transformer power block.

The USB connection is to link to an external computer.

The category 5 cable can be used to connect to a router to make a Wi-Fi link.

Fluids

Ink and fake blood products will permanently stain and cannot be removed.

The internal reservoir systems feed the fluids to the IV arms, urinary catheterization, CNS head, and the optional lower right Bleeding Leg and the lower Left Bleeding Arm.

NOTE: The tears

Fluid Ratio

Feature	Water	Green Liquid Soap
Tears	100%	0
Nose	70%	30%
Mouth	50%	50%
Blood	50%	50% blood mixture

Mixing Blood Powder: Included with the simulator is an initial supply of blood powder; mix it according to the instructions printed on the bag. Mix this blood supply with water as noted in the fluid ratio chart. The volume capacity of the blood reservoir is 500 cc. Left over blood can be stored in a refrigerator for up to two weeks.

A Large Volume Syringe is included with your manikin; it has tubing and a metal connector attached. This syringe will be used to fill the fluid reservoirs at the ports located under the cover on the right shoulder of the manikin.

1. Fill the syringe with the appropriate fluid for the feature you are filling



2. On the right shoulder of the manikin reside a series of metal ports in a recessed area.
3. Insert syringe tubing connector into a labeled port
4. Push the tubing connector into the port, it may be easier to insert the connector by depressing the metal locking tab, the tubing will snap into place when you release the tab.
5. When the tubing connector is inserted into the port it is securely installed and will not leak.
6. Immediately above each reservoir port is a vent. When opened, this vent allows air from the reservoir to escape, making room for the fluid.
7. Open the vent before using the syringe to fill the reservoir. Fluids will exit the vent when the reservoir is full. When that happens, close the vent and wipe it dry.
8. Again, push gently on the syringe plunger to fill the tubes leading to the feature. The reservoirs have a 4 ounce (118 cc) capacity, except the blood reservoir, it has a 500 cc capacity.
9. When the feature tubing is full, the fluid will discharge from the feature. Example, tears will flow from the tear ducts on the lateral corners of the eyes.
10. Stop pushing on the syringe plunger and close the air vent.
11. Remove the syringe tubing connector by depressing the metal tab on the port.
12. Gently pull the connector out of the port.

NOTE: The tear air vent should be left open. It acts as a control for the amount of tears that will flow. If you close the vent and run tears, the tears will run for a longer time than when the vent is open. To stop the flow of tears when the vent is closed, open the vent. It will take another minute or so for the flow to stop.

NOTE: When placing the manikin on its side, do not operate the tears.

NOTE: It is necessary to circulate the blood in the veins (a closed loop).

1. Remove the right lower leg. Within the knee joint is the Bleeding Leg blood supply tube that has push-and-twist connector attached.
2. Connect the extra tubing (included in the vein kit) with the appropriate connector to the bleeding leg blood supply connection. This allows any air to escape, making it easier to fill the blood system.
3. Put the end of the extra tubing in a container to catch escaping fluids.
4. When the blood flows out of the tubing, the system is full.
5. Disconnect the tubing at the knee joint; it will not leak.

Chest tube and pericardiocentesis: The source for the chest tube and pericardiocentesis fluid is a reservoir bag that must be filled with water and attached to the port labeled C.

1. Close the tubing clamp before filling the reservoir bag.
2. Fill the bag and attach the tubing end to port C.
3. Once the tubing is securely connected
4. Elevate the reservoir bag about 30" above chest level
5. Release the tubing clamp so the water can flow into the system.
6. Insert a chest tube into both sides of the manikin to discharge any trapped air.

Urinary Catheterization: Male and/or female urinary catheterization can have fluid discharge after the abdominal reservoir has been filled with up to 220 cc of fluid.

1. Remove the abdominal section (located under the chest overlay/trunk shorts) from the patient simulator to avoid dripping fluid into the simulator.
2. The quick-disconnect valve must be depressed to release the genitalia tubing from the reservoir to fully remove the abdomen.
3. Pull the stomach bladder from the corrugated tubing holding it in place. A slight twisting motion will assist in removing the stomach from the tubing.
4. Leave the speaker wire connected, as long as there is sufficient length to move the abdomen off the manikin.

See the photos below for a view of the abdominal section.



5. Remove the screw-in cap.
6. Inject the fluid into the reservoir utilizing the syringe device. Fill the reservoir for best function. Use food coloring to tint the water supply to an appropriate color.
7. Install and tighten the screw cap. Wipe off any excess spill.
8. Re-install the abdomen:
9. Reconnect the stomach and corrugated tubing.
10. Reconnect the genitalia tubing
11. Attach the speaker wires if not already connected
12. Insert the inferior end of the abdomen with the genitalia tubing into the gap between the hook and loop strips in the torso ledge, positioning the tubing so that it is not kinked.
13. Wedge the superior end of the abdominal section between the rib cage and the white plate under it.

Eliminate any air trapped in the tubing that may block fluid flow; insert an IV catheter or urinary catheter.

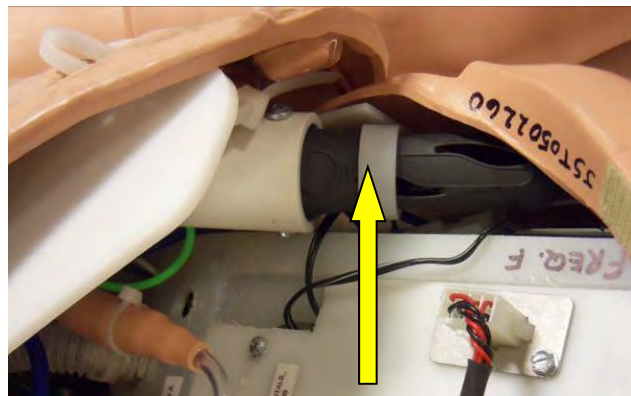
When a 16 French catheter is inserted so that it engages the one-way-valve, fluid will be discharged.

CO2 cartridge: The ETCO2 discharge depends upon the installation of a food grade, 16 gm, CO2 cartridge. The cartridges are available at restaurant supply stores, or hobby beverage supply stores.

WARNING: CO2 cartridges used for pneumatic pistols and rifles contain a lubricant, which may deteriorate the SMART STAT system. Use of these cartridges, are at your own risk.

To access the cartridge holder:

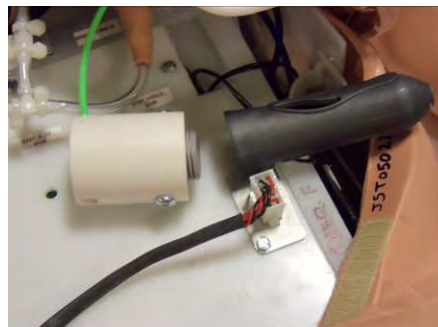
1. Remove the chest overlay
2. Remove the abdominal section to access the area under it; it is not necessary to disconnect the abdomen
3. Locate the cartridge holder and the white polyethylene strap that holds the cartridge shell



4. Gently pull the cartridge holder out of the white strap. Do not stress the tubing attached to the back of the holder.



5. Unscrew the cartridge shell from the holder.



1. To insert the cartridge into the simulator, refer to the process photos and follow steps 2 through 8:
2. Insert the new cartridge into the holder with the neck of the cartridge pointing out of the holder



Actual attachments may vary.

3. Carefully thread the holder onto the device.
4. The device has a needle that will puncture the cartridge and releases the gas. When you begin to feel the pressure of the cartridge against the needle, quickly spin the holder to seat the cartridge against the device base.
5. Failure to spin the holder quickly will result in the cartridge releasing its supply of CO₂ and it will be necessary to remove and install a new cartridge.
6. Push the cartridge shell back into the retaining strap and slide it down to where the holder contacts the strap.
7. Replace the abdomen.
8. Replace the chest overlay

ECG MONITORING AND DEFIBRILLATION



The precordial limb lead site for 5 lead monitoring

Five ECG limb lead connectors on the chest are attached to the rib cage for removing the overlay skin. The ECG snaps cannot be used for defibrillation and each one is labeled, “NOT A DEFIBRILLATION SITE”. Doing so will void the warranty.

To view limb lead ECG waveforms, attach the 3, 4, or 5-lead ECG cable to the ECG snaps at the following locations:

- RA (right arm): right shoulder snap
- LA (left arm): left shoulder snap
- LL (left leg): left waist snap
- RL (right leg): right waist snap
- PL (precordial lead): center of chest

Two defibrillation sites associated with lead II are located on the chest at the apex and sternum locations.

These two sites are not labeled and have a base to screw in the Chest Post Adapters (included in the accessories bag). The Chest Post Adapters are two threaded, ¼” diameter, metal parts; screw these into the two defibrillation sites and attach the training cable to the adapters.

Chest Post Adapters are available from your distributor or Simulaids using part number Z08. If you did not order the free training cables with your simulator, contact your distributor or Simulaids and have the make and model of your defibrillator.

Defibrillator with hand-held paddles will need to use a pair of Manual Defibrillator Adapters that are inserted in the defibrillator chest sites. These adapters are 1-1/2” diameter discs and are included with the patient simulator. You can order the Manual Adaptors, 053, from your distributor or Simulaids.

To deliver defibrillator and pacer pulses, and to view the PADS ECG waveform attach the training cable (or hold paddles) at the following locations:

Apex: left side of chest, lower rib area

Sternum: right side of chest, middle rib area

Blood Pressure Arms



This photo shows the hole on the upper arm for the B/P cuff connection. Except for the hole the upper IV arm skin will cover this area.

Both arms can be used for determining the systolic and diastolic pressures.

1. Place the B/P cuff on one arm
2. Insert the projecting connection port of the cuff bladder into the hole on the upper arm. A very small amount of vegetable oil on the “O” ring of the connector will allow it to slide into the arm port for a air-tight seal.
3. Wrap the cuff tightly around the arm and securely fasten the hook and loop.

Chest tube insertion

This bilateral feature will allow the use of normal sized trocars during the insertion process. This trainer is not designed to be a technique trainer; rather, it offers the opportunity to install a chest tube to indicate that the procedure is necessary under current patient conditions as evidenced by the practitioner's assessment.

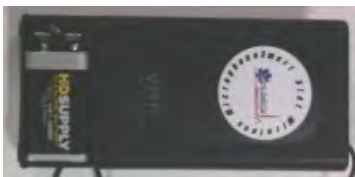
1. Close the tubing clamp before filling the reservoir bag.
2. Fill the bag and attach the tubing end to port C.
3. Once the tubing is securely connected,
4. Elevate the reservoir bag about 30" above chest level
5. Release the tubing clamp so the water can flow into the system.

External Jugular Veins (EJV)

Aspiration of blood is available, however infusion is not supported.

1. Remove the EJV neck skin from the patient simulator
2. Pull one end of the vein tubing out of the skin and expose the white stopper at the end of the tubing.
3. Remove white stopper
4. Fill the tubing with simulated blood
5. Replace the white stopper.
6. Position the neck skin back under the patient simulator chest overlay
7. Feature is ready for an IV catheter

Head Microphone



Battery location



Overall view of microphone

A wireless microphone is included with SMART STAT, so the instructor can communicate through the patient simulator.

No installation is necessary; works with a 9 volt battery.

1. Clip the microphone to a convenient spot near the speaker's mouth
2. Insert the plug firmly into the transmitter case
3. Screw the retainer onto the case to avoid pulling out the transmitter wire.
4. Switch to "On" and the speech will be emitted through the patient simulator's head speaker

NOTE: If the head speaker squeals when not in use, turn the transmitter switch to the standby position.

The Pulse Oximeter supplied with your patient simulator attaches to the right index finger.

1. Spread the oximeter wide open
2. Carefully insert the three prongs into the three holes on the right index finger.
3. Clamp the oximeter onto the finger

It will generally take about two minutes for the pulse oximeter to cycle through its routine connection before the digital values are displayed on the oximeter. The digital values are controlled by setting the heart rate values and SP02 levels.



Amputated Bleeding Leg Number 408

The amputated right lower leg can be substituted for the original leg without any modifications to the patient simulator.

1. Remove the knee pin out of the right leg
2. Disconnect the pulse tubing
3. Remove the standard lower leg.
4. Attach the single blood line from the amputated leg to the blood line exiting the right thigh
5. Position the amputated leg so the knee pin can be inserted through the thigh and leg

The blood supply for this leg is the blood reservoir that holds 500 cc's of fluid. See section, Fluid Ports for filling reservoirs.

Appropriate application of a tourniquet (T-Q) to the lower leg above the injury results in the cessation of bleeding. Without proper application of the T-Q, and under normal treatment modalities, the infusion of blood via the IV veins results in additional fluid available to bleed out.

Proper care of this leg requires the thorough flushing of the vein tubing of any blood substance until the flow of fluid is clear. See section, Fluid emptying reservoirs for removing fluids from reservoirs.

Amputated Bleeding Left Arm Number 468

This optional moulage piece bleeds on all SMART STATs manufactured after June 2011. It is necessary to remove the left lower arm from the SMART STAT before mounting the moulage . To remove the left lower arm:

1. Remove the elbow IV arm skin by detaching it from the white posts that hold it in place
 2. Slide the skin down off the lower arm.
 3. Bend the outside lower arm flesh colored tabs away from the hard plastic mounting panels to access the clip inside the mounting shaft of the simulator's elbow.
 4. Remove the clip
 5. Remove the shaft
 6. Gently lower the arm away from the elbow area to reveal the interior connections
 7. Detach the electrical cable by pulling it apart
 8. SMART STATs after June 2011-Detach the pneumatic tubing by twisting and/or pulling the connection, SMART STATs before June 2011-depressing the metal tab and pulling the connection apart.
 9. Remove the lower arm.
- SMART STATs before June 2011, will not have the blood line available to attach the moulage. Contact technical support for instructions on how to add this feature to your SMART STAT.*
10. Pull the connector out from under the chest skin
 11. Push and twist the connector into the amp arm connector.
 12. Secure the moulage arm to the upper arm of the patient simulator.

Intraosseous (I/O) Leg Number 409

The optional I/O lower right leg contains a disc in the proximal tibia for the insertion of penetrating I/O devices; there are no features for fluid administration. Included with the leg are replacement skins and discs

Xtreme Trauma Bleeding Moulage Arm Number 481

This arm depicts injuries that result from explosions. It is designed to slip over the left upper arm of SMART STAT and utilize the bleeding line from the interior blood reservoir. It is tourniquet sensitive and application of the T-Q will stop the bleeding.

Refer to steps 3 through 12, Amputated Bleeding Left Arm number 468 for set up instructions.

Xtreme Trauma Bleeding Moulage Leg Number 482

This leg depicts injuries that result from explosions. It is designed to connect to the right knee of SMART STAT and utilize the bleeding line from the interior blood reservoir. It is tourniquet sensitive and application of the T-Q will stop the bleeding.

Refer to steps 1 through 5, Amputated Bleeding Leg number 408 for set up instructions.

Xtreme Trauma Moulage Arm Number 642

This arm can be used for both humans and Simulaids' STAT manikins. The arm has straps to hold it in place on humans and manikins. The Trauma Arm, number 642, arm does not bleed.



1. **Turn on SMART STAT:** The switch is located in the recessed area of the left shoulder, switch it so that the “—” is depressed.

The manikin will be active with default values:

- Blood Pressure 120/80
- Respirations Rate 10
- Heart Rhythm Normal 72 BPM
- Lung Sounds Normal
- Bowel Sounds Normal
- Pulses On

Connecting SMART STAT to the iPad®

Steps:

1. Open your iPad® box and follow the manufacturer’s set up instructions
2. Set up an iTunes® account
3. Go to the App store
4. Search for SMART STAT



5. Download/install the SMART STAT App on the iPad®



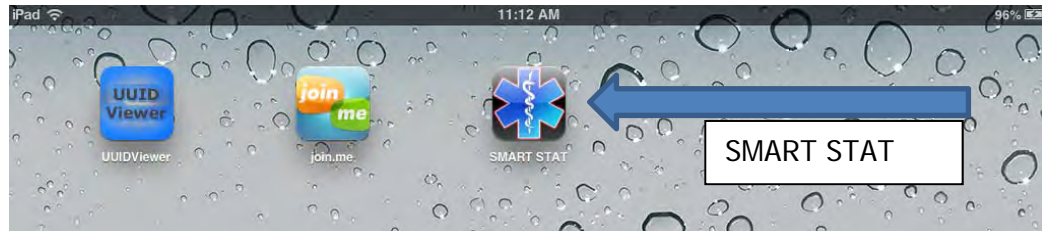
6. Go to the iPad® Settings screen



7. Turn off Wi-Fi; turn it back on

8. Select the Wi-Fi labeled “Sim-XXXX4” (a number suffix). Before it will open, a password pop up window will appear. Type in the password: simulation01 (all lower case) and follow the prompt. After it is connected, it will have a check mark next to the labeled Wi-Fi and the name will show up on the left column where Wi-Fi is identified.

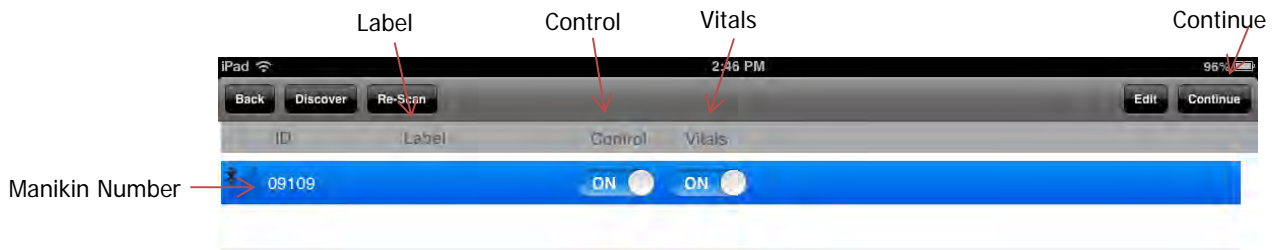
9. Close the Settings screen.



10. Go to the SMART STAT app and initialize it.



11. On the SMART STAT app home screen, tap the “Patient Simulators” icon




12. If you want to name your patient simulator tap the tap the area under the “Label” column. A text box will display that when tapped will bring up a keyboard to enter a name for the patient simulator. After you type the name, tap the ‘Done’ button on the keyboard to save it.
13. Tap the switch for the “Control” column. Wait until it has connected.
14. Tap the switch for the “Vitals” column.
15. In the upper right corner of the iPad® screen, tap the “Continue” button.
16. Tap anywhere on that line once and wait for the blue highlight to appear on that line.

Student



17. This will display the student screen. **It is not required to select a student name to run on the fly; it is only necessary to select a student name when running sessions and/or Recordings.** An initial run through the iPad® set up will not have any student names, but if there were any students, this is where they will display. Go to the upper right corner of the screen and tap “Continue”.



This will display the features operation screen. Always tap the green preset arrow  before starting any operations. This automatically syncs the patient simulator and iPad®.

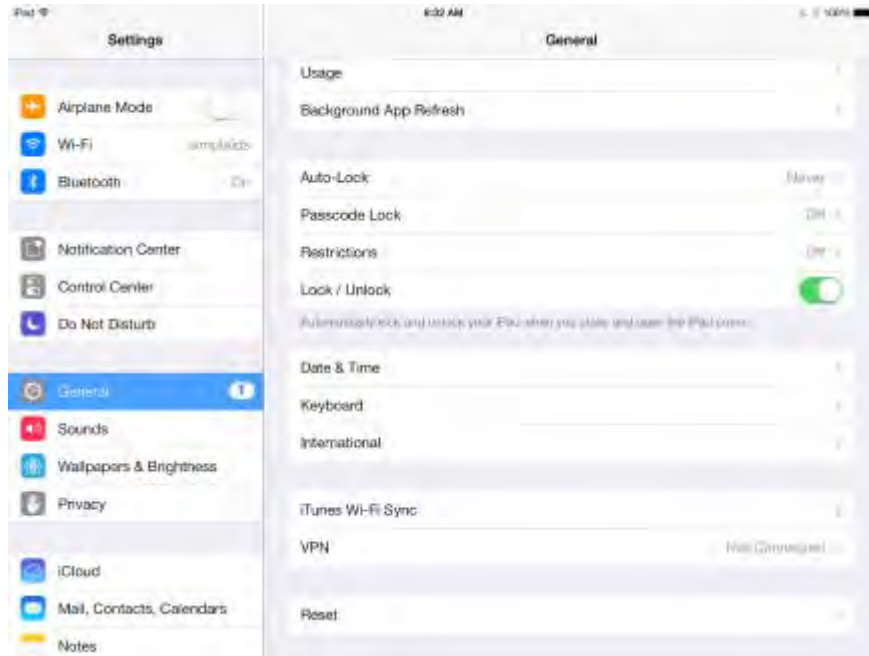
You will hear a series of bells indicating the simulator and the iPad® are connected.

iPad® Settings for International use outside of the USA

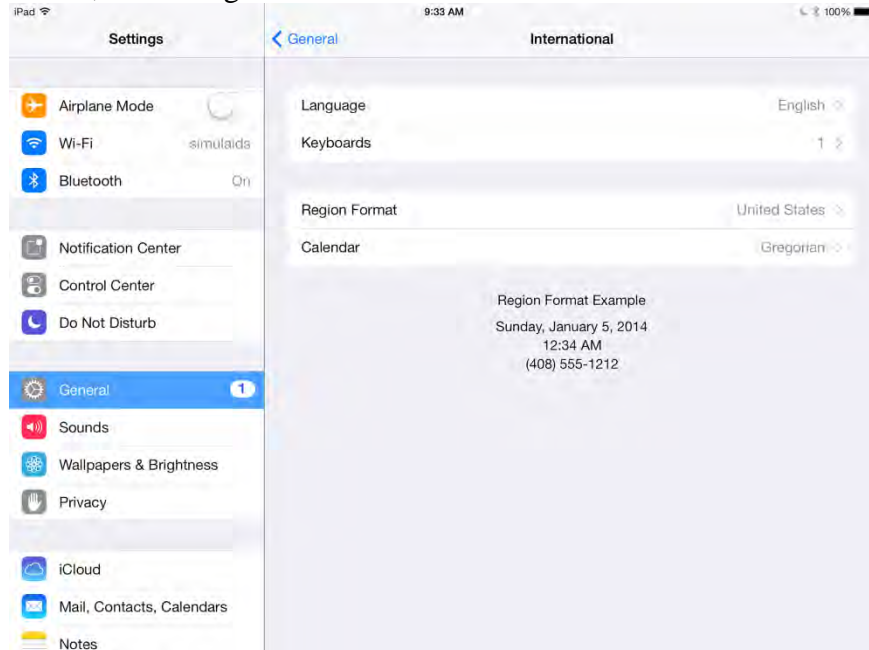
Some settings on the iPad® may cause a conflict with applications. To avoid conflicts, especially for international use outside the United States, it is necessary to keep the international settings as follows:

Go to settings on the iPad® then scroll down to general settings.

Once in the General Settings, scroll the right side down to International.



Once in International, the settings shown on screen should be set to:



Language: English

Keyboard: 1

Region Format: United States

Calendar: Gregorian

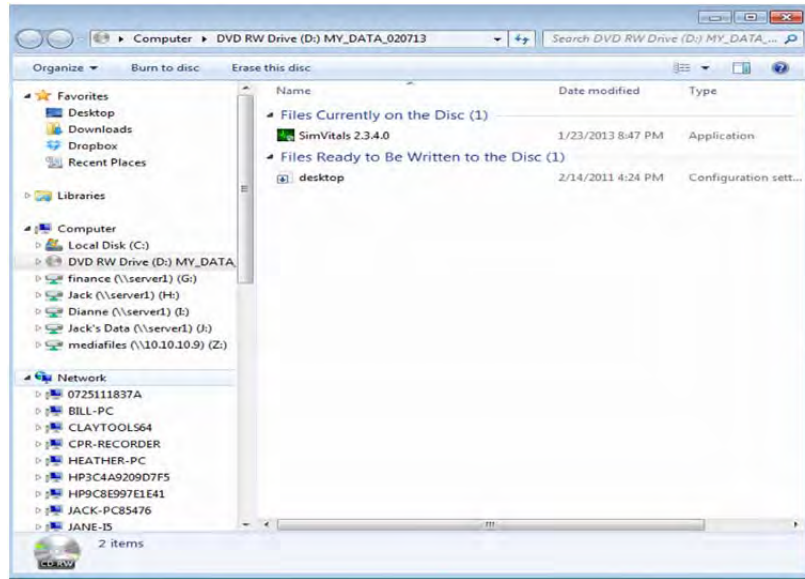
Installation of Sim Vitals No. 410 Wi-Fi

If Sim Vitals 5-Line Hospital Monitor was included with a new SMART STAT purchase Sim Vitals is already installed .

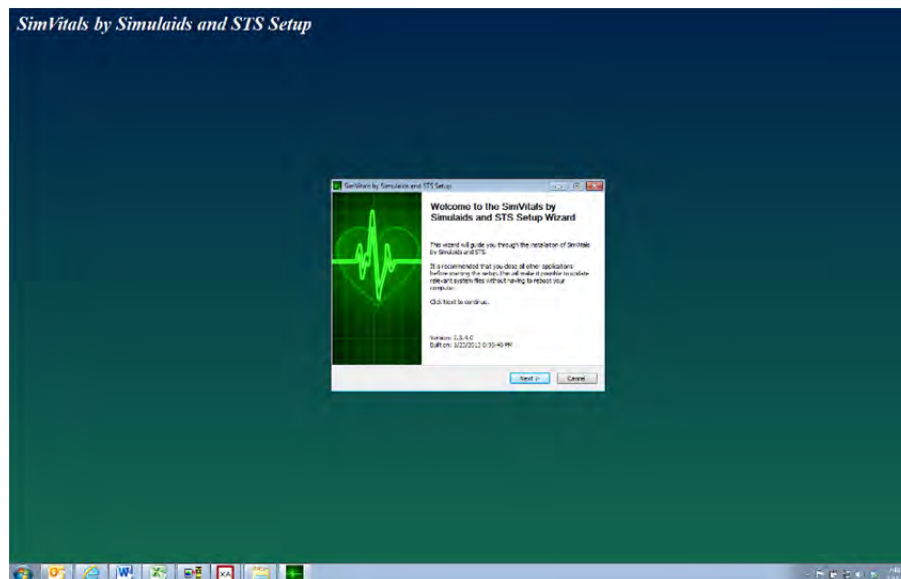
If you **purchased Sim Vitals separate** from your SMART STAT follow steps 1 through 8 to install the software.

If you are **upgrading Sim Vitals** it is necessary to remove the existing software before following steps 1 through 8.

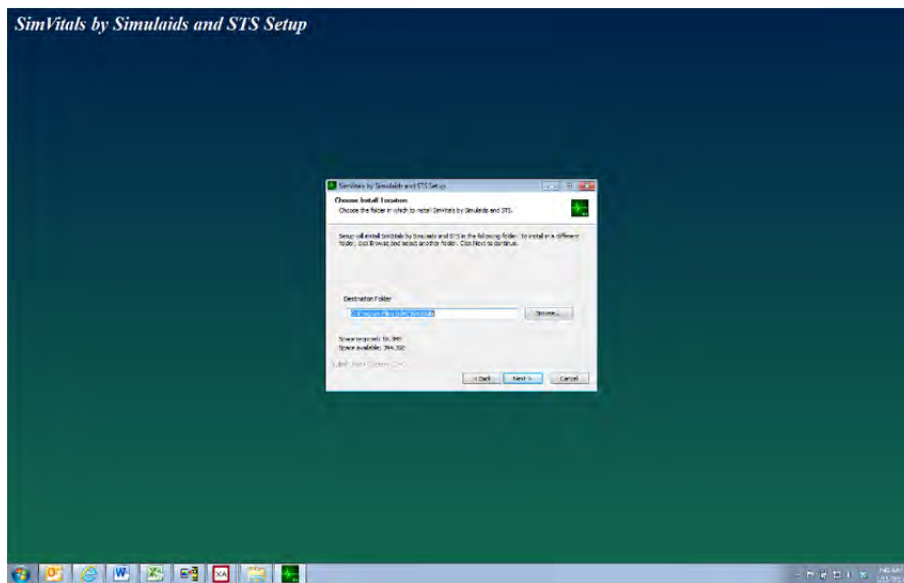
1. Select Sim Vitals



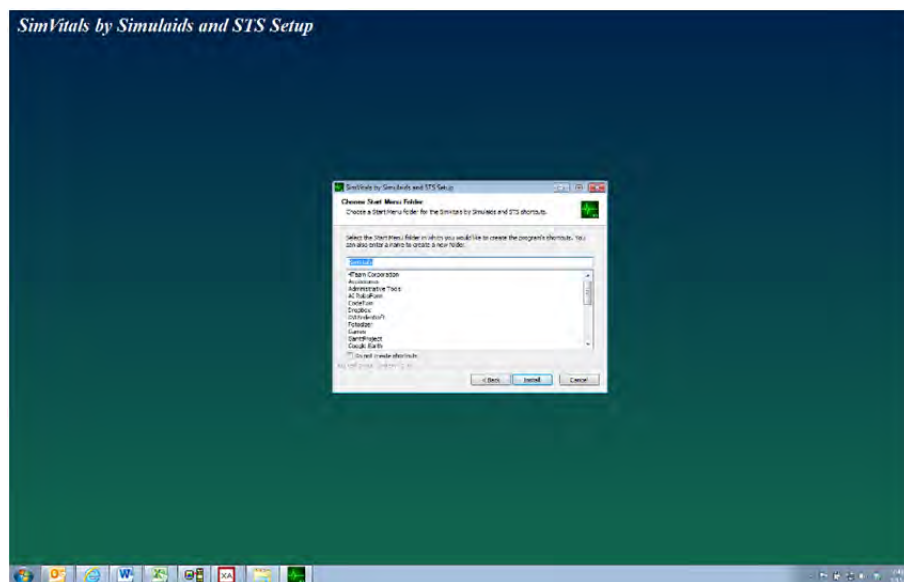
2. Press next.



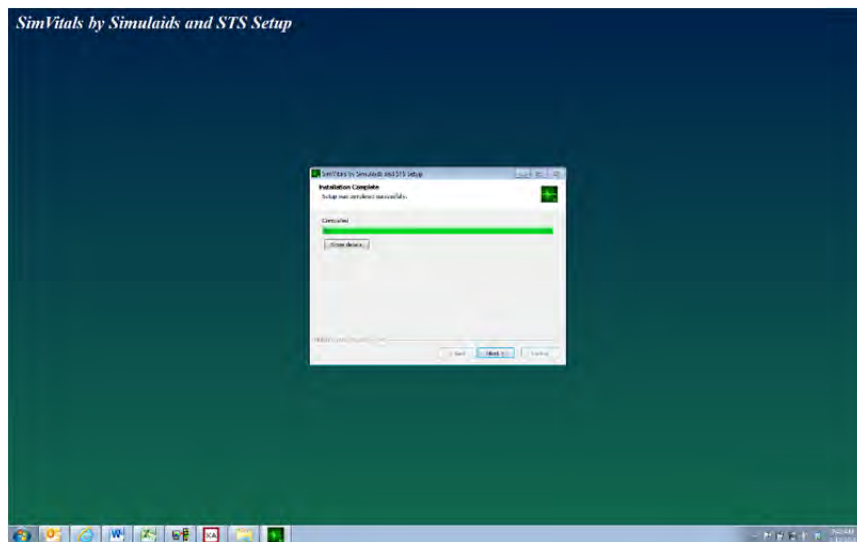
3. Press next.



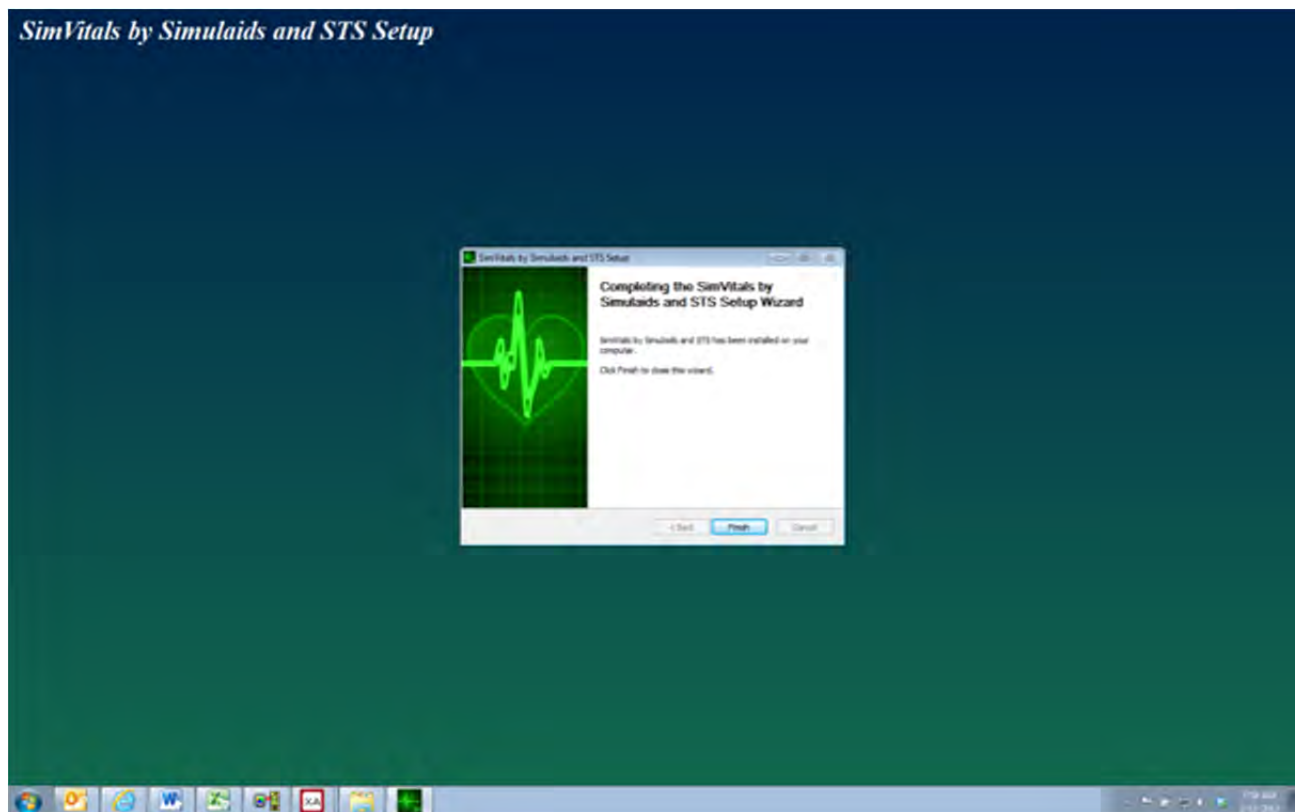
4. SimVitals folder will automatically show up.



5. Complete installation and press next.



6. Press finish when install is complete.

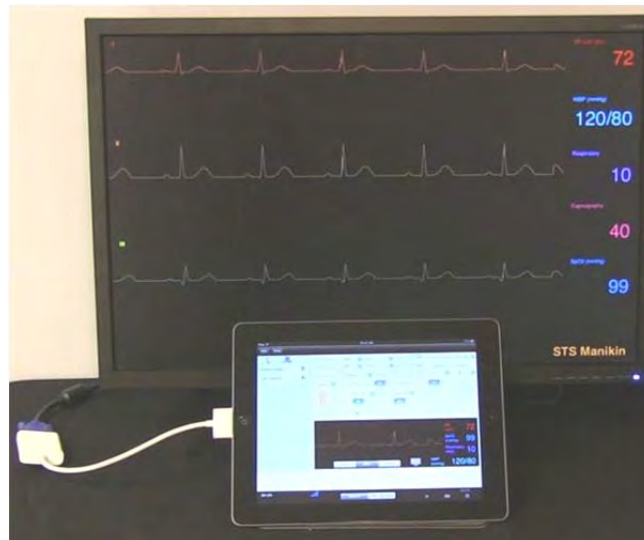


Using the iPad® there are two ways to view Sim Vitals 5-Line Hospital Monitor on a full screen.

1. One method is to use the “TV Screen” button on the bottom of the instructors’ Sim Vitals Monitor, which is displayed on the SMART STAT features Control Screen. Tap that TV Screen button once and the entire iPad® screen will fill with the hospital monitor. To revert to the partial screen on the control panel tap the back button in the upper corner.

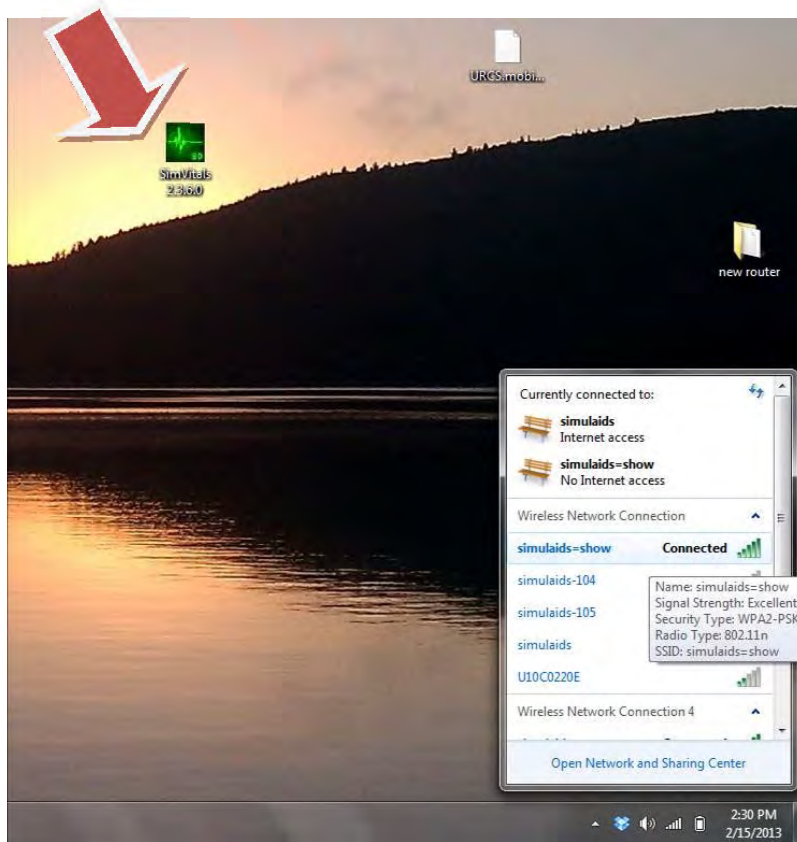


2. The second method is to hook up the iPad® connector cable to an external flat screen. Using the appropriate Apple® adapter, sold separately, you can have an external screen displaying the Sim Vitals 5-Line Hospital Monitor.



Starting the Sim-Vitals 5-Line Hospital Monitor

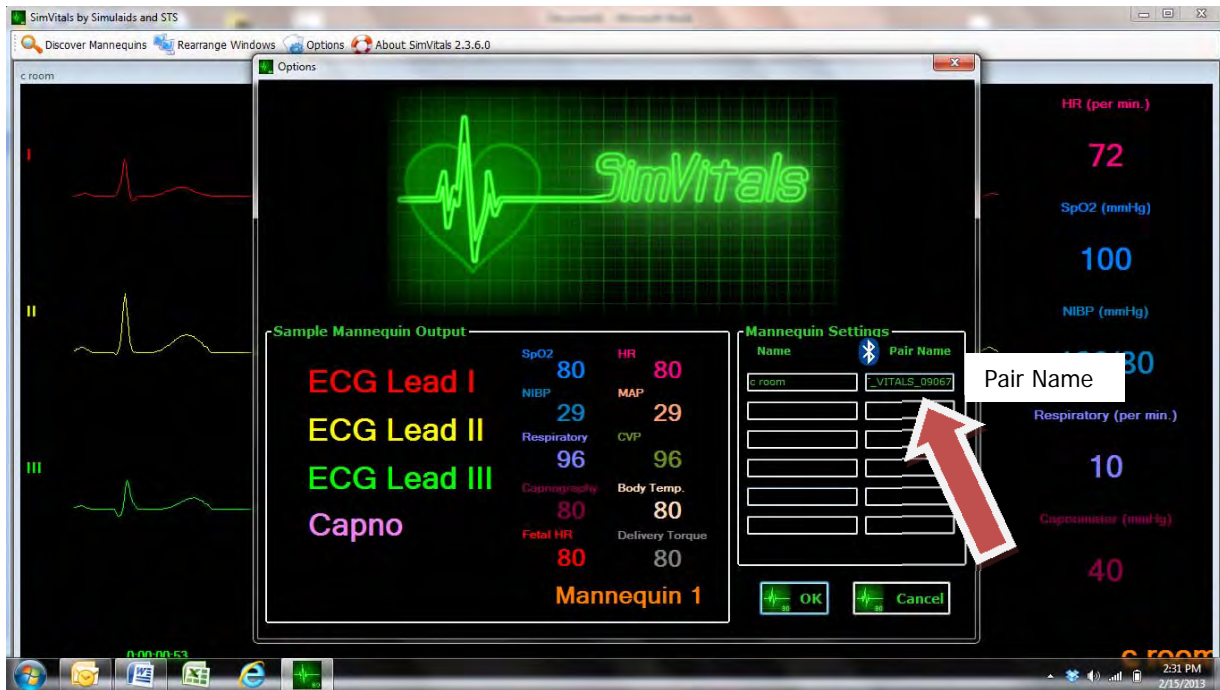
Double click Sim Vitals icon to start application.



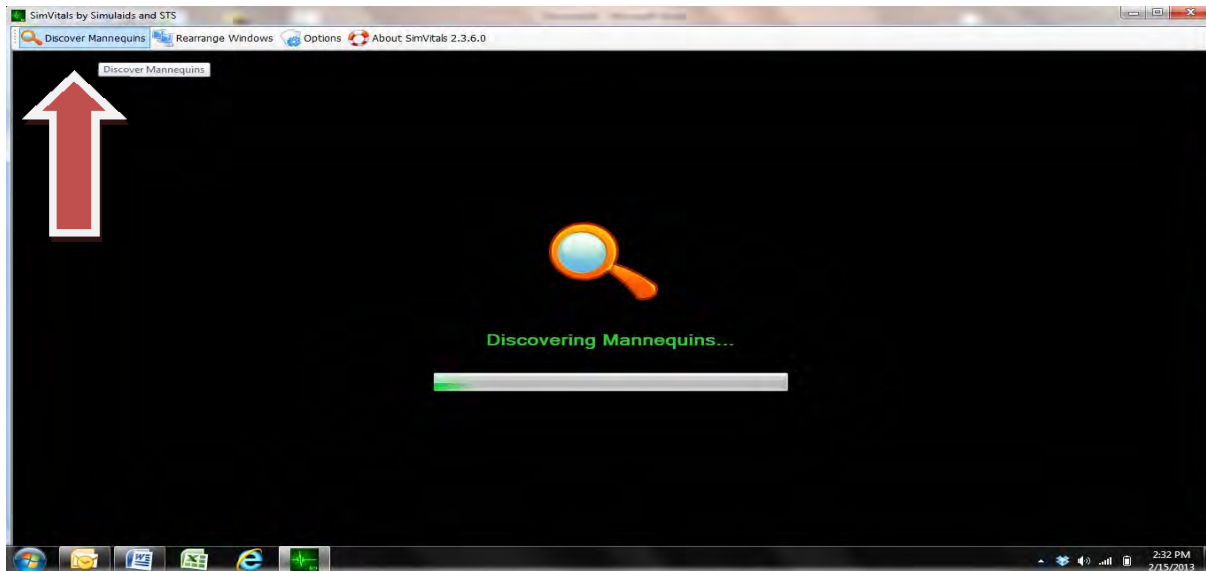
Set Wi-Fi to simulator network name, Simulaids-“xxxx”.



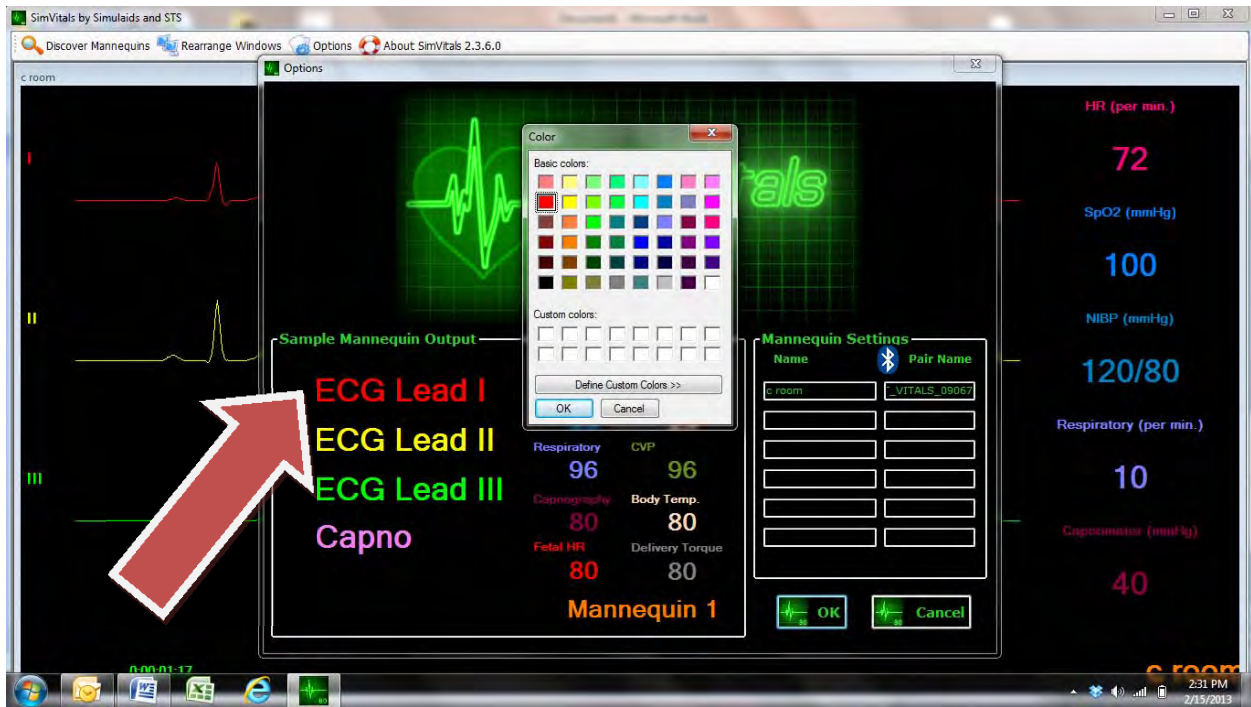
Enter mannequin number in Pair Name. Example (STAT_VITALS_00000)



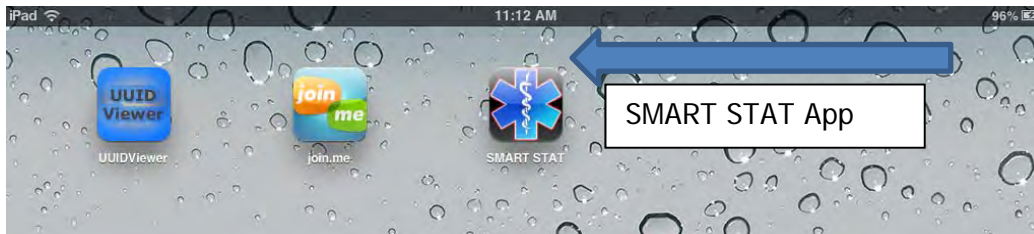
Tap discover mannequin.



To change lead color, right click lead # and pick color.



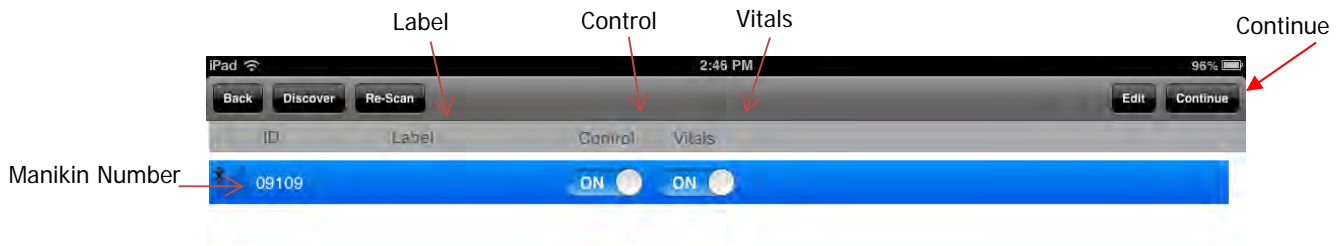
Running the Patient Simulator



1. Go to the SMART STAT app and initialize it.



2. On the SMART STAT app home screen, tap the “Patient Simulators” icon



3. If you want to name your patient simulator go to the line representing the patient simulator (shown by the icon on the left column with a number), tap the area under the “Label” column. A text box will display that when tapped will bring up a keyboard to enter a name for the patient simulator. After you type the name, tap the ‘Done’ button on the keyboard to save it.
4. Tap the switch for the “Control” column. Wait until it has initialized.
5. Tap the switch for the “Vitals” column.
6. Tap anywhere on that line once and wait for the blue highlight to appear on that line.
7. In the upper right corner of the iPad® screen, tap the “Continue” button.

Student Screen



8. This will display the student screen. **It is not required to select a student name to run on the fly; it is only necessary to select a student name when running sessions and/or recording.** An initial run through the iPad® set up will not have any names here; if there were any students on your list, they will show up here. Go to the upper right corner of the screen and tap “Continue”.

Operation Screen

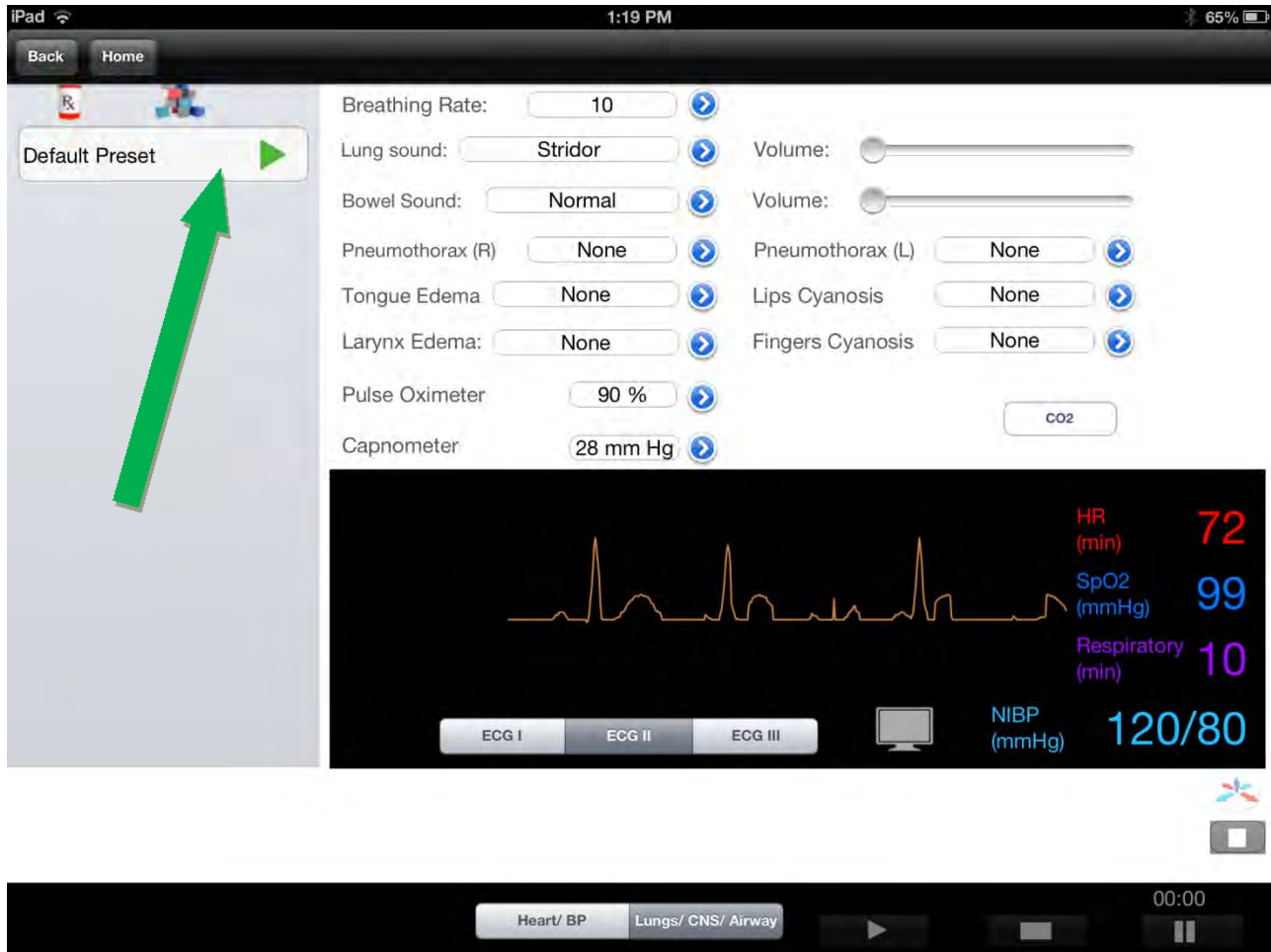



Photo shows the Green arrow to tap to establish presets on the SMART STAT

This will display the features operation screen. Always tap the green preset arrow  before starting any operations. This automatically syncs the patient simulator to the iPad®.

You will hear a series of bells indicating the patient simulator and the iPad® are connected.

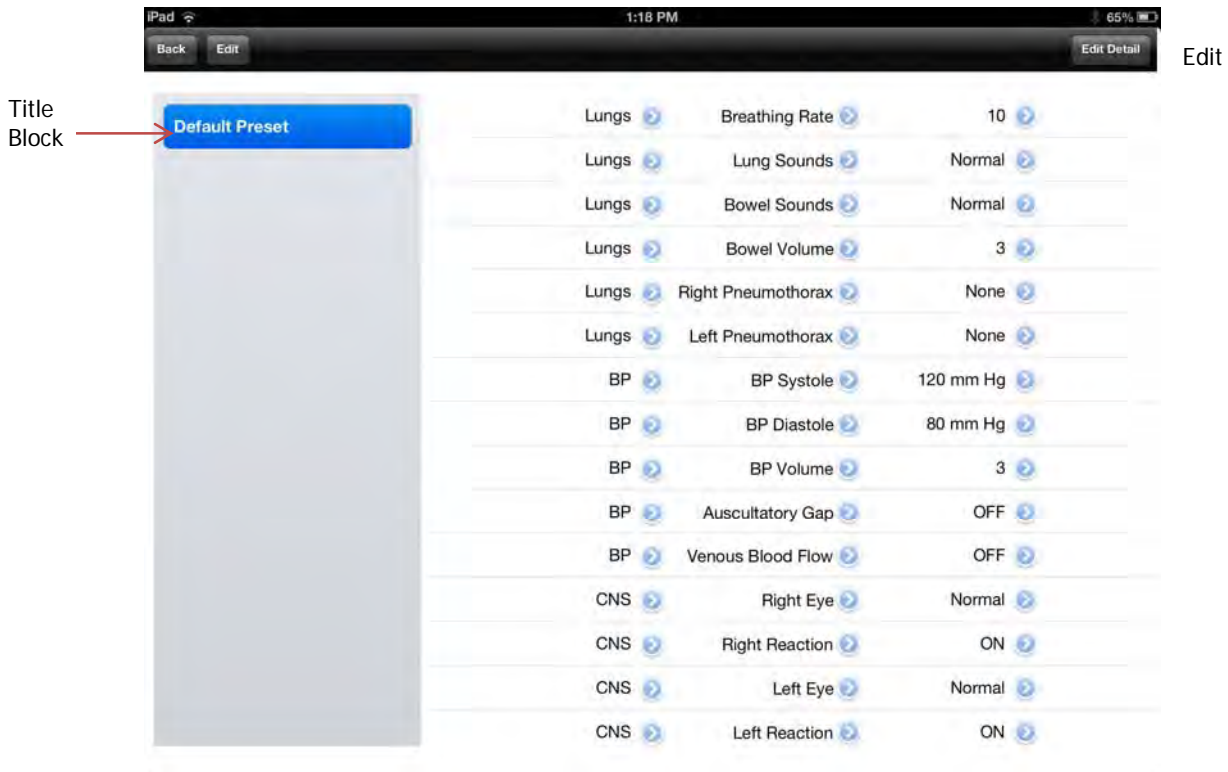
User Interfaces

PRESETS

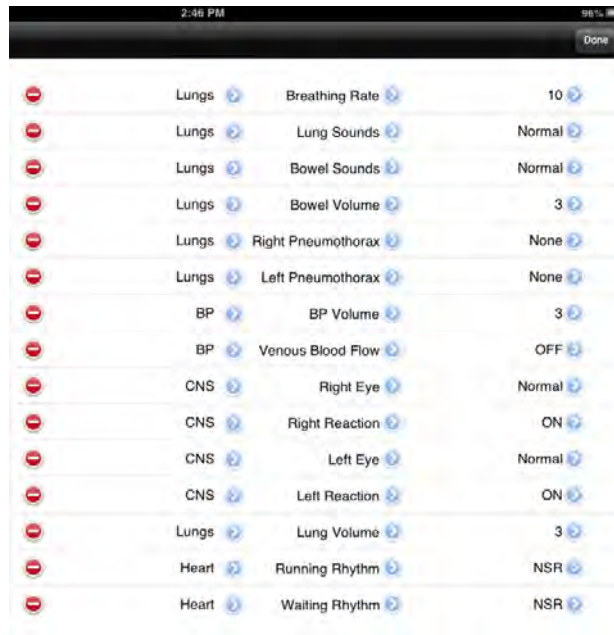
Presets allow you to create a set of feature lists that will put the simulator back into any given set of presets with the tap of one button. Presets are especially useful when working with scenarios that put the simulator in all kinds of conditions.



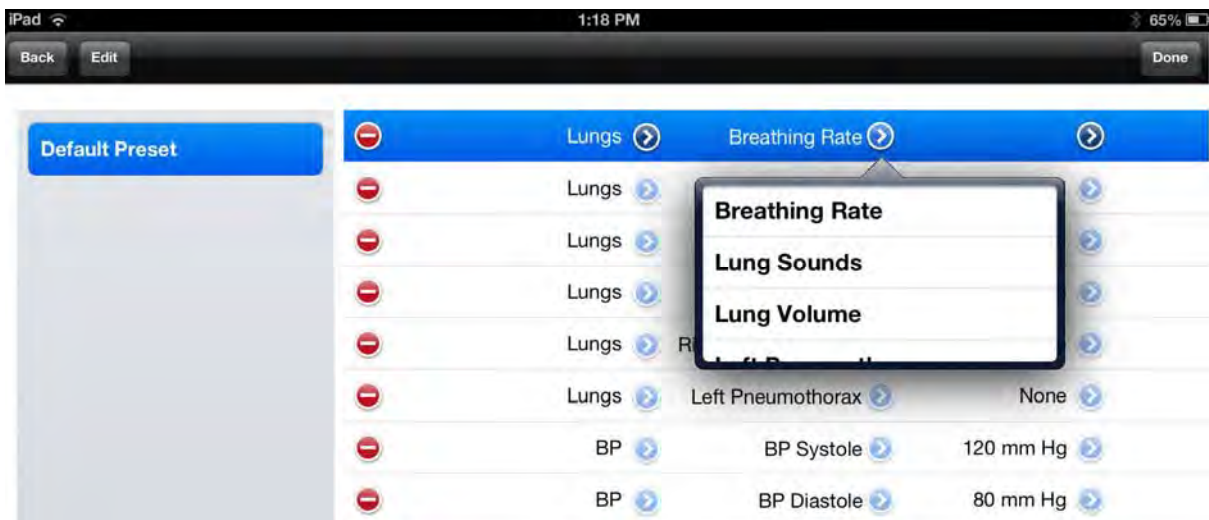
On the home screen of your SMART STAT app, tap the PRESETS icon.



1. Selecting one of the options by tapping the title block displays a screen with all of the features listed in one place. The screen above shows the highlighted title block, Default Preset. Scroll down this list to see all the features listed.
2. To change/edit features listed in a Default Setting, tap the edit detail in the upper right hand corner of the screen.



3. Tap any of the line items that you want to change and you will be given the red dot icons . Selecting any of the features by tapping on a line will result in a highlighted blue line through that selection.
4. Go to the right column and tap the little blue arrow icon to access the various choices you have for that item. The program list is complete; it is recommended that you do not delete any lines.

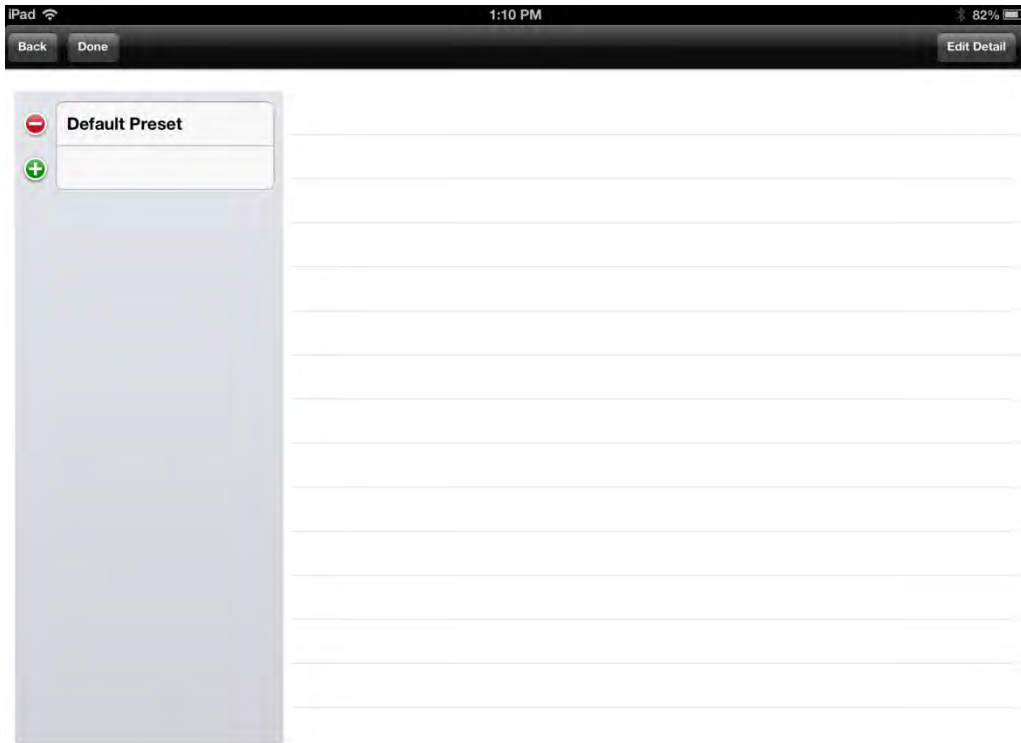



5. Select the rate to default to by tapping the selection. Then tap the 'Done' button in the upper right corner.
6. When you are done changing the defaults to your preferences, simply press the 'Done' button and they will be available to you with a single tap on the Default Preset on the control screen.

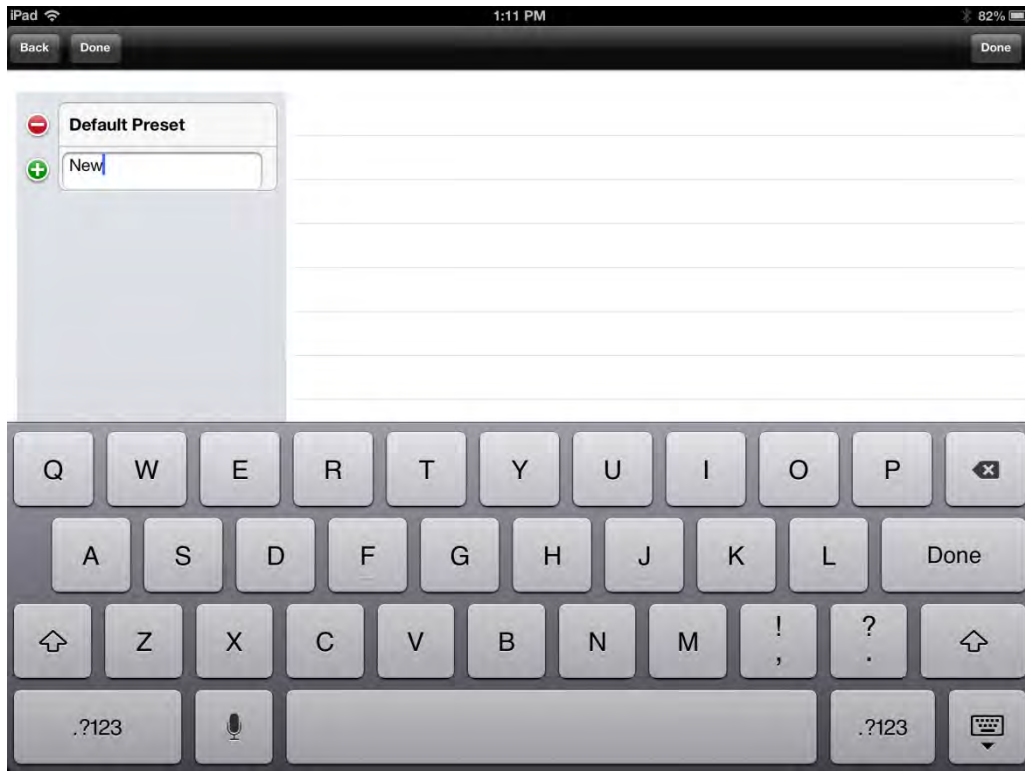
To create a new set of Defaults:



1. Start by tapping the PRESET icon on the home screen,
2. Tap the 'Edit' button on the upper LEFT sided of the screen



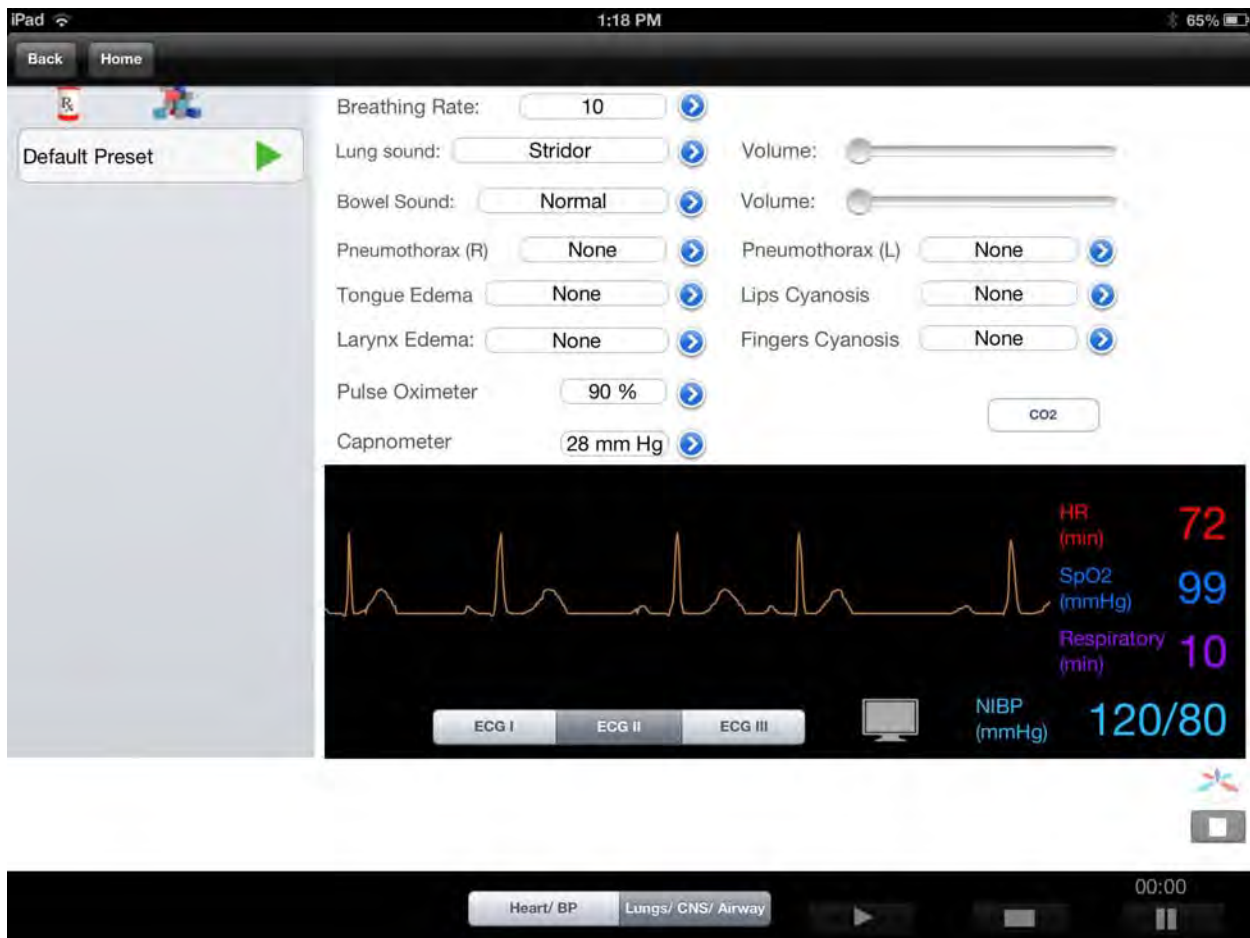
3. Tap the green + circle icon  to name your preset.



4. Press 'Done' on the left side.
5. Select the new Preset List and tap the Edit Detail button on the upper right corner.
6. Continue to build your preset list as you did in the above Preset steps 1 through 6.
7. When the Preset list is finished, tap the 'Done' button. It will be saved and available on the control screens for immediate use.

Consider custom presets as scenarios that will be used over and over again. It is easier to use a custom preset to reset your SMART STAT rather than depending on a scenario.

Control Screens



1. There are two screens available: Heart/BP and Lung/CNS/Airway. Change between the two screens to access all of the features of SMART STAT and operate on the fly with no further instructions necessary.

STUDENT LIST

1. To create a list of students, go to the SMART STAT app home screen.

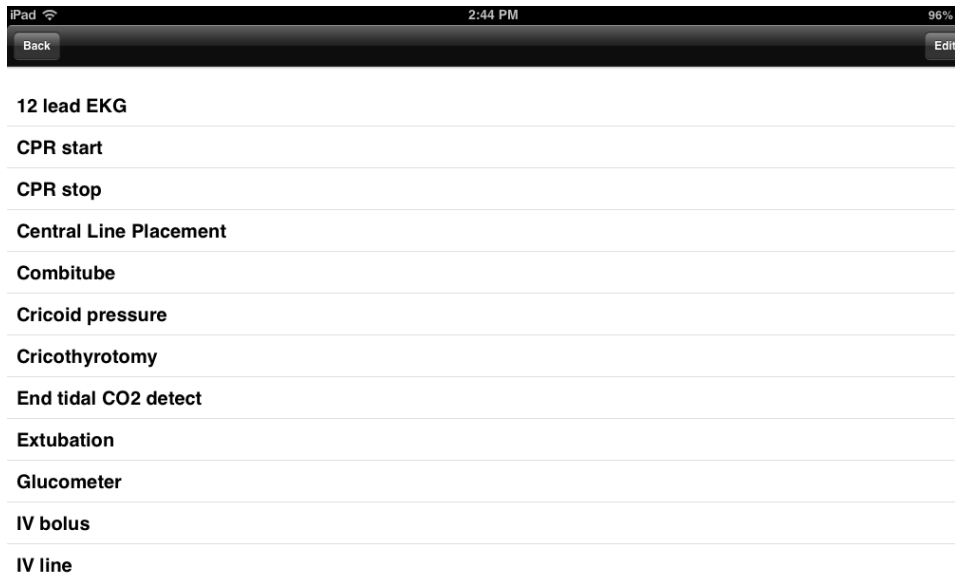



2. Tap the Student icon
3. Tap the 'Edit' button on the right upper corner of the screen once.

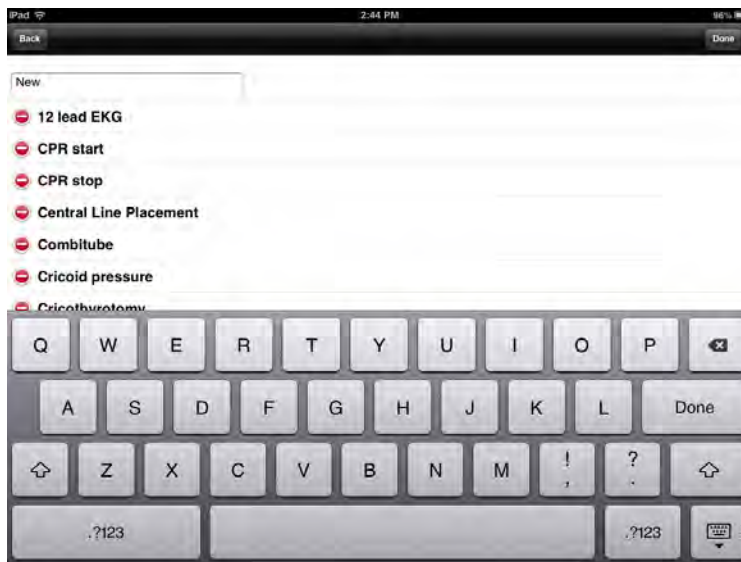


4. Tap the green + circle and enter a name and/or a team name.
5. Tap 'Done'.
6. To enter another name, repeat steps 3 through 5 for each additional name to be entered.

SKILLS LIST



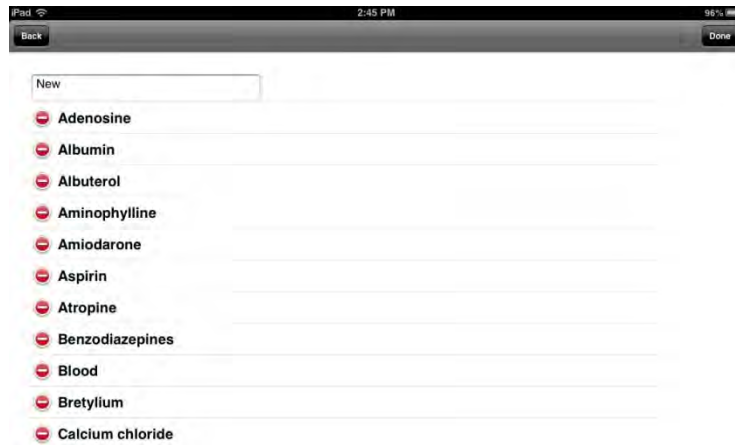
1. To create or edit a skills check list, go to the home screen and tap the Skills icon.
2. Select a current skill by tapping it to highlight the skill.
3. In the upper right corner of the screen tap the “Edit” button.
4. You will be given the choice of editing any of the items or adding a new one. To add a new skill tap the green + circle  and fill in the blank. Add as many skills as you want to have available for any of your session recordings.



5. When you are finished, tap the ‘Done’ button in the upper left corner of the screen.

Each scenario has a place for the selected skills. The skills will appear alphabetically; to see the entire list scroll down.

MEDICATION LIST



1. To create or edit Medications, go to the home screen and tap the Medication icon.
2. Follow create/edit 'Skills' steps 1 through 4 to create/edit Medications. Scroll down the page to see the entire list of available medications.
3. When you are finished adding medications to the list, hit the back button in the upper left corner to return to the home screen.

SCENARIO LIST




This is where you create custom scenarios for any of your curriculum needs. There are simple examples included with the app. If you have friends, who are building scenarios on their Simulaids' app, you can exchange files with them by using the Import/Export feature.




To view scenarios or to create a new scenario, tap on the Scenario icon to open the feature.




Your first choice is to work with a scenario. Start by tapping the 'Edit' button in the upper right corner.



A list of scenarios will appear, along with a green + circle  button. From this screen you can delete, add or edit existing scenarios.



1. Delete a scenario: tap the red – circle  and choose delete on the far right side.
1. Add a scenario: tap the green + circle  to start with adding a name.
2. Tap the blank box, type the name and tap the keyboard 'Done' key to save it.
3. Tap the blue arrow circle  on the right side of that line to bring up the scenario
4. Tap the 'Edit' button to begin building your scenario.
 - a. Select the time you want it to start; generally 00:00 (minutes/seconds)
 - b. Use the drop down lists to create your scenario features' operations.
 - c. Create a time line of when you want certain features to be active by tapping the individual arrow buttons for each. Then tap the 'Done' button.
 - d. To put another line on the scenario, tap the Edit button again and enter your next line.
 - e. Tap 'Done' and then 'Edit' to continue building and complete your scenario.
 - f. When you back out of the screen, your scenario is saved.

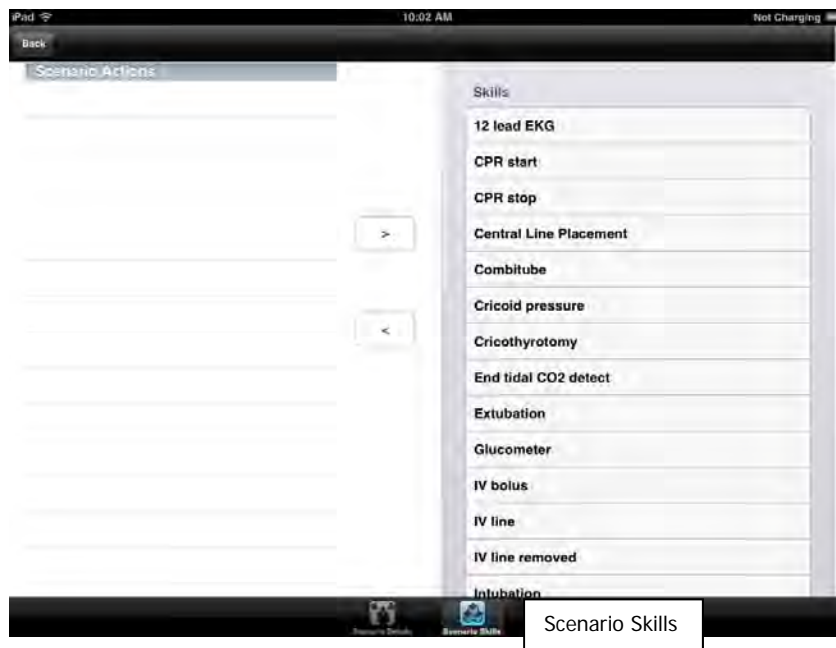
In the upper left corner of the screen, tap back until you reach the screen you need to continue your work on the iPad®.

If you enter the Scenario screen and wish to edit an existing scenario, tap the blue arrow circle  on the right side of the line you want to change and edit as explained in, A through F.



At the bottom of the edit scenarios screen and above this text line are the two icons shown in the black line.

When you are done editing the scenario details  (left icon) you may tap the Scenario Skills  button to add a set of skills the student is expected to perform during the scenario.

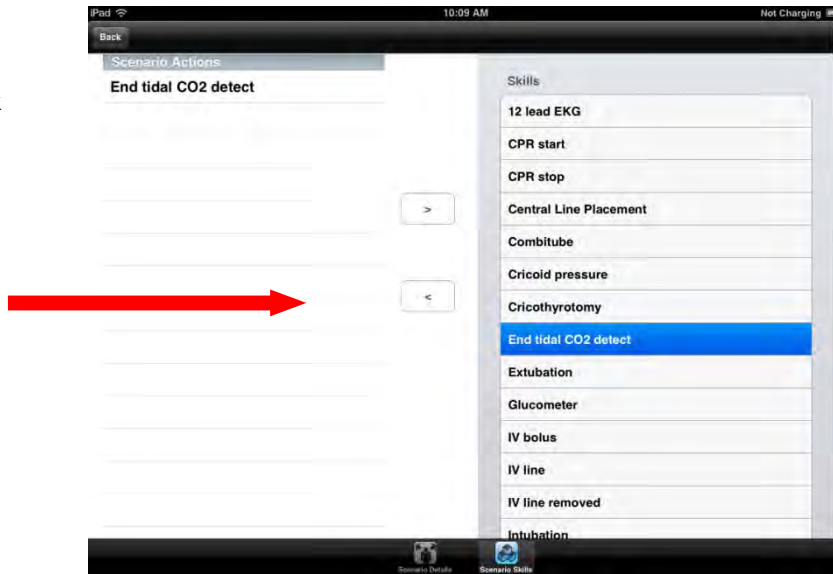


- Tap a skill to highlight it and then tap the left arrow to place the skill set on the scenario file.
- After all of the skills have been entered for a specific scenario, tap the back button at the top.

When you play the scenario, these skill sets will display in the left column on the control screen and can be checked off as the student performs the skills.

- To add a skill that is not on the scenario list, back out to the home screen and go to the Skills section to add the additional skill sets. When you return to the scenario actions screen, the added skills will be available.

Back



- d. Eliminate skill sets from the list by highlighting the skill on the left column and tapping the right arrow to put it back in the database column on the right side. Back out of the screen to save it.

Select Simulation

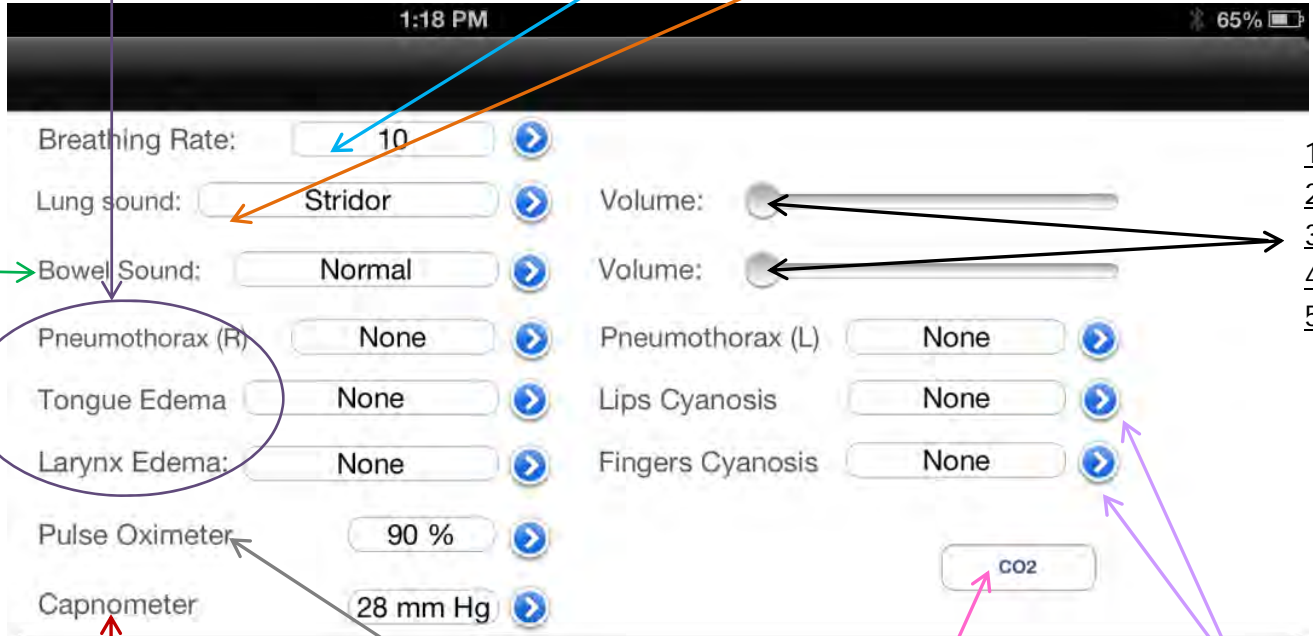
- Normal
- Hyperactive
- Hypoactive

Lungs/CNS/Airway Screen

- None
- Partial
- Complete

- Apnea
- 5
- 10
- 20
- 30

- Normal
- Crackles minor edema
- Crackles moderate edema
- Stridor
- Rhonchi scattered
- Rhonchi bases
- Wheeze upper
- Wheeze bases



- 1
- 2
- 3
- 4
- 5

0 mm Hg	38 mm Hg
4 mm Hg	39 mm Hg
8 mm Hg	40 mm Hg
12 mm Hg	41 mm Hg
16 mm Hg	42 mm Hg
20 mm Hg	44 mm Hg
24 mm Hg	46 mm Hg
28 mm Hg	50 mm Hg
32 mm Hg	54 mm Hg
36 mm Hg	58 mm Hg

100%	80%
99%	75%
98%	70%
97%	60%
96%	50%
95%	40%
94%	30%
93%	20%
90%	10%
85%	

- On
- Off

- Normal
- CO Low
- CO High
- Cyanosis Low
- Cyanosis High

1 st	66
2nd I	40 – 52
2nd II 3:1	26
2nd II 4:1	19
3rd	37
AFIB	120 – 160
AFLTR	150
ASYS	0
J BRADY	42
NSR *	72
S BRADY	40
S TACH	120
SVT	210
VF	> 200
VT fast	185
VT poly	> 200
VT slow	140

Heart and Lung Screen

The screenshot shows the 'Heart and Lung Screen' interface with the following elements and annotations:

- ECG Running/Waiting:** Mode set to NSR. Rate controls are annotated with a red box containing values: -10, -5, 5, 10.
- PVC/PEA:** Both are OFF. Annotations include a green box with 'On' and 'Off' and a vertical list with values 1, 2, 3, 4, 5.
- Pacing Capture:** Set to 80 mA. A blue vertical list on the right shows mA values from 40 to 140.
- Heart Sound:** Set to Normal. Volume control is annotated with a purple box '0 - 300 mmHg'.
- Pulses:** Venous Blood Flow is ON. Auscultatory Gap is ON. A red box 'Tap to activate' points to the BP Cal (150) button.
- Reaction:** Both are ON. A purple box '0 - 300 mmHg' is also annotated here.
- BP Volume:** Set to 80. A blue vertical list on the right shows mA values from 40 to 140.
- Visual Pulse Viewer:** A separate window showing pulse waveforms for various sites: Right Brachial, Right Radial, Right Popliteal, Right Pedal, Left Brachial, Left Radial, Left Popliteal, Left Pedal.
- Other Settings:** Runny nose, Foaming Mouth, Tears, and BP Cal (150) are visible.

STAT SIMULATION DEFAULTS

MANIKIN CONDITION		DEFAULT
Airway		
	Tongue	Normal
	Capnography	40 mm hg
	Larynx	Normal
	Voice	N/A
	Sternal Retraction	N/A
Heart		
	Running Rhythm	NSR
	Waiting Rhythm	NSR
	Convert	Disabled
	PEA	Off
	BP Systole	120
	BP Diastole	80
	BP Volume	II
	Pacing Capture	80 mA
	Heart Sounds	Normal
	Heart Volume	II
Lungs		
	Breathing Rate	10
	Lung Sounds	Normal
	SpO2	99%
	Lungs Volume	II
	Right Lung	None
	Left Lung	None

ECG RATES

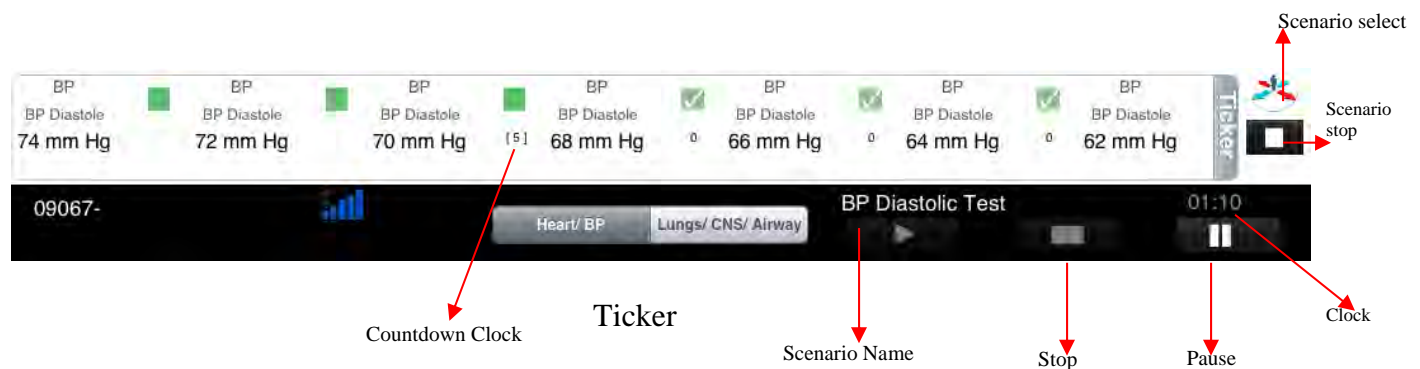
ABBREVIATION	CONDITION	RATES
2nd I	2nd Degree Type I AV block	60*
2nd II	2nd Degree Type II AV block, Wide QRS	60*
2nd II PVC	2nd Degree Type II AV block, PVCs, Wide QRS	60*
3rd	3rd Degree AV Block, Wide QRS	60*
AFIB	Atrial Fibrillation	140-200
AFLTR	Artrial Flutter	150
ASYS	Asystole	0
J BRDY	Junctional Bradycardia	60
NSR	Normal Sinue Rhythm	72
S BRDY	Sinus Bradycardia	50
S TACH	Sinus Tachycardia	165
Sinus PVC	SINUS RHYTHM WITH PVCs	90
SVT	Supraventricular Tachycardia	240
VF	Ventricular Fibrillation	>200
VT Fast	Ventricular Tachycardia	170-220
VT Poly	Ventricular Tachycardia, Fluctuating QRS	<200
VT Slow	Ventricular Tachycardia	148

*Heart rate display will change when R wave drops.

Running a Session, Recording a Scenario

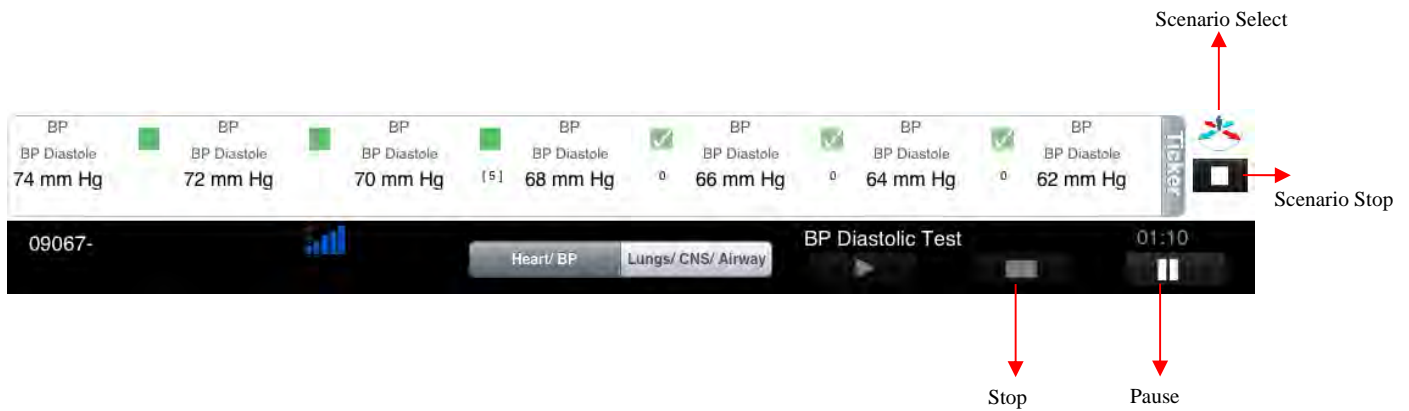
A session is a timed and logged series of events based upon how the instructor challenges the student(s) and how the student(s) responds to the challenges.

1. To start a recording session, connect to a patient simulator from the Home screen
2. Tap the Patient Simulator icon
3. Turn on the Control button
4. Turn on the Vitals button to send signals to the monitor screen
5. Select the line to highlight it blue.
6. Tap Continue once (wait for it) in the upper right corner.
7. This displays the Student screen.
8. Tap Continue to connect the patient simulator to the iPad®.
9. Tap the Home in the upper left hand corner
10. Tap the Scenario icon
11. Select a scenario
12. Tap Continue
13. Select the patient simulator you connected to in step 1.
14. Tap Continue
15. Select Student/Team
16. Tap Continue
17. Tap the default preset green arrow
18. Start scenario



To insert a scenario into a recording session, tap the Home button in the upper left of the screen.

The control screen is displayed and the scenario is outlined in the Ticker strip at the bottom of the screen. Within the ticker strip, and at each feature change, is a countdown clock in parenthesis [-5]. Observe these clocks to know when the next change will occur according to the scenario programming. (By unchecking a feature that has not played will cause it to be skipped.) Below the ticker strip are the play, pause and stop buttons. Pause the session and the elapsed time clock will continue to run, but the log clock stops until you resume by tapping the pause icon again. If you stop a session recording by tapping the white rectangle, all features and session recordings stop.

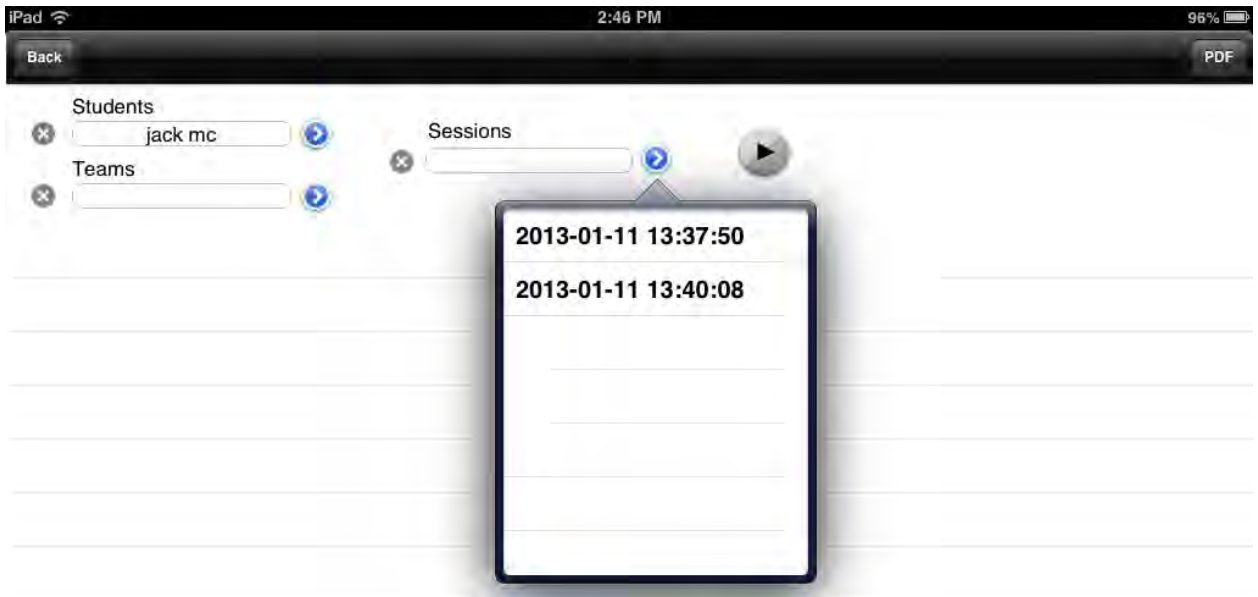




At the bottom of the control screens are two icons on the margin above the elapsed time clock. These represent the scenario selections and the scenario stop button. When you are recording a session, you can switch scenarios, as in the instance of first starting a presentation scenario, then changing to a deterioration scenario. Do this by tapping the stop icon and then tapping the scenario icon to start a new scenario. You can stop a scenario and start another scenario as many times as you want during a recorded session. Tapping the stop button below the ticker line stops all recordings and ends the session.

Viewing, Printing, and Saving Recordings

Go to the home screen and find the session recordings by tapping the Recordings icon. Once you have completed a session recording, you will find it on this screen. This feature allows you to view, print or export session recordings.

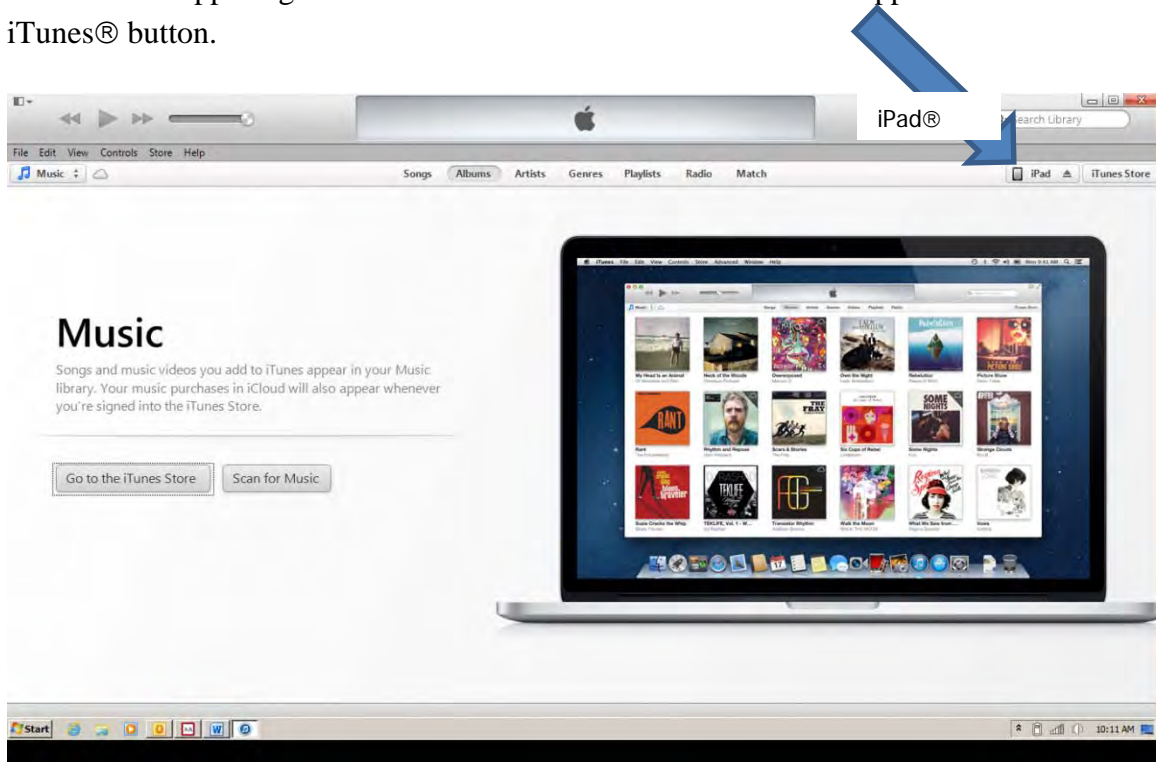
1. From the home screen tap the Recordings icon.
2. Locate and select the student name on the Students drop down menu, and select student's session from the Sessions drop down menu.



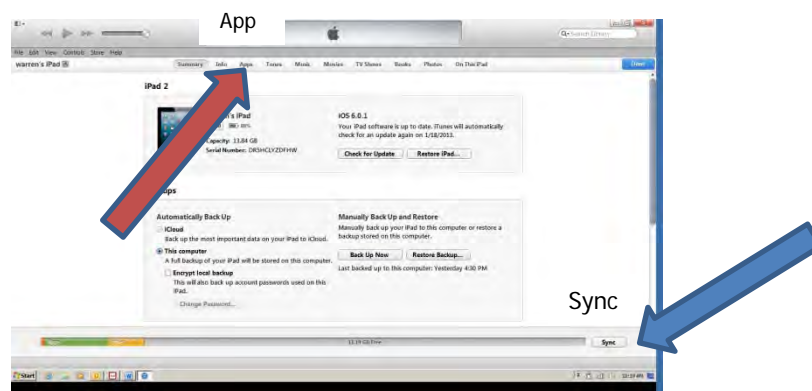
3. Tapping the arrow icon  will cause the session recording to list by line in chronological order. To see another recording by the same student, tap the Sessions drop down list and select it and tap the arrow  again.
4. When you have selected the session that you want to print, tap the PDF button in the upper right corner of the screen. This places the file in a location to transfer it to iTunes® for the next time you sync your iPad®. Put as many session recordings as needed in this file for transfer to iTunes®. Once the recordings are in PDF form, they can be printed and/or emailed.

Retrieving PDF files from iTunes®:

1. Synchronize the iPad® to your computer by connecting the charging cable to the iPad® and the USB port on the computer. (You also can refer to your iPad® user guide.)
2. Open the iTunes® on your computer.
3. Watch in the upper right corner of the tools line as the iPad® icon appears next to the iTunes® button.



4. Click on the iPad® icon on the left side of the button. If you click on the up arrow icon, you will not go to the correct location.
5. On the bottom **right** of the screen tap the Sync button.



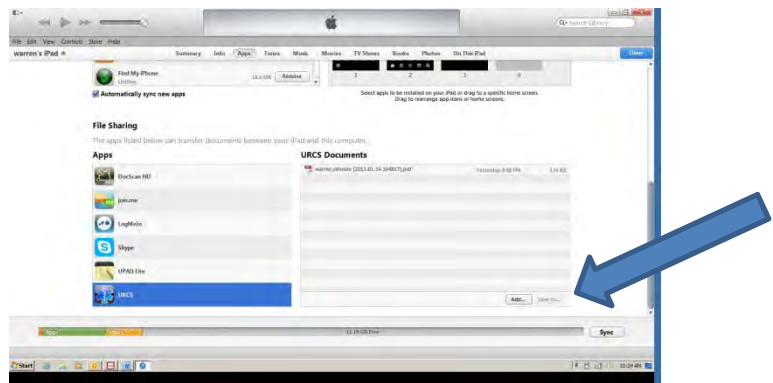
6. At the top of the screen you'll see the progress of the sync process. Wait for it to complete.
7. Under the Apple® bar, on the line that identifies your iPad®, find the **Apps** button and tap that.
8. Move to the far right of the screen and drag the **slider** down to view the bottom of the page.



9. Find the SMART STAT Apps icon  (Star of Life) and tap it once.




10. On the lines in the right column you will find all of the files that you have exported from the iPad® app, including PDF student recordings, scenarios and other lists.



11. You can print, save, copy, paste or discard any of the files after saving the files on a computer by using the “Save to...” button on the bottom of the iTunes® Documents column.

A sample of a pdf file generated on iPad® SMART STAT



Friday, January 18, 2013, 8:19:14 AM Eastern Standard Time

Completed Session Report

Session Information

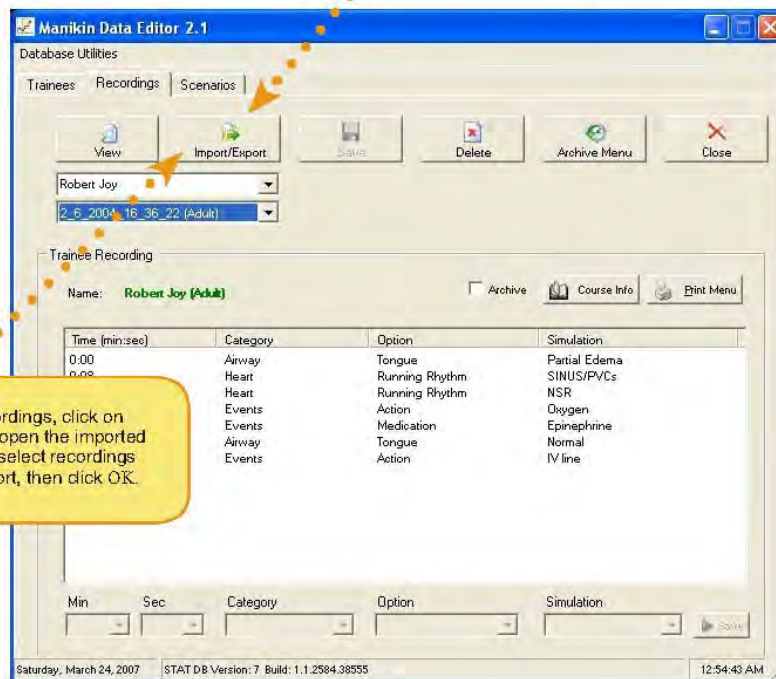
Started 2013-01-17 15:06:34 Ended 2013-01-17 15:07:26 Elapsed 63 seconds
Warren Johnson

Time	Description	Comment
0:00	Airway > Capnometer > 42 mm Hg	
0:10	Vital Signs Checked	
0:15	Aspirin > Correct	
0:24	BP > BP Diastole > 40 mm Hg	
0:29	BP > BP Diastole > 42 mm Hg	
0:34	BP > BP Diastole > 44 mm Hg	
0:42	Heart > Running Rhythm > J BRADY	
0:49	BP > Venous Blood Flow > OFF	

Exporting

Exporting from Manikin Data Editor (MDE), included with SMART STAT's that were supplied with Pocket PC, purchased prior to March 1, 2013.

To export recordings, click on **Import/Export**, select the recordings you wish to export, then click OK. A file will be created that can be shared with other PCs.



To import recordings, click on **Import/Export**, open the imported recordings file, select recordings you wish to import, then click OK.

To import and/or export files using your iPad®, refer to your iPad® user guide.

Running SMART STAT

To change the default ECG rhythm on the SMART STAT (Set up defibrillation adaptors; see section ECG):

1. Access the “Heart” screen (page 43)
2. Tap the “Running Rhythm”
3. Select a rhythm to change to
4. Change the default rate by tapping on the rate adjustment values

To set the “Waiting Rhythm”:

1. Tap the “Waiting Rhythm” box
2. Select the rhythm for the manikin condition after a successful discharge
3. To “Convert” to the waiting rhythm, tap the “Convert” button and the button will darken. There will 90 seconds available to perform a successful defibrillation.
4. If there are no actions in 90 seconds, the rhythms will not change when a discharge is delivered, unless the instructor resets the convert button.

You can **palpate the systolic pressure or auscultate normally at the antecubital fosse speaker** location. **It is necessary to calibrate the Blood Pressure before using (Installing the cuff; see section Blood Pressure cuff).**

1. Pump the cuff up to a pressure of 150 mm Hg on the gauge.
2. When the pressure stabilizes at 150, use the B/P screen to select “Calibrate”(page 43). This balances the readings on the gauge with the settings on the screen.

Options available on the B/P screen allow for:

- Auscultory Gap Settings
- Turning Off Various Pulse Points
- Turning On The Venous Blood Flow
- Setting the Amplitude of the Speaker in the Antecubital Fosse

To initiate a Tension Pneumothorax condition:

1. Go to the Lung screen
2. Choose the side to be affected and tap that box
3. Select a status
4. The manikin condition will change when the selection is tapped.
5. The air compressor will begin filling the bladder
6. Successful catheterization will discharge the air
7. To discharge the air again from the manikin, repeat steps 1 through 4.
8. To return the simulator to its default conditions select a preset.

Chest tube insertion (Fluid filling; see section Fluid Reservoirs):

1. Locate the insertion site in the mid-axillary line of the 5th intercostals space.
2. Adequately lubricate the chest tube to slide it into the insertion port.
3. Insert a chest tube into both sides of the manikin to discharge any trapped air.
4. The simulator will discharge fluid when the tube reaches a proper depth and comes into contact with a one-way valve

I/O access site is located in the manubrium. The chest site is suitable for insertion and removal practice of commercially available devices. This site is not designed for fluid transfer.

Lung Function can be determined via spontaneous respirations. A basic library of emergent lung sounds, six anterior and four posterior auscultation sites reside within the intercostals spaces palpable on the chest. The location-specific selection of sounds and a discharge of CO₂ for capnometry are shown on the optional Sim Vitals 5-Line Hospital Monitor that offers SP0₂ values from the simulator's virtual patient pulse oximeter device. The features are controlled on the iPad®. Features with lung functions include, varying color appearances of the finger nail beds and lips coinciding with cyanosis or a flushed appearance for toxicology or disease state hints.

The basic library of emergent lung sounds are used under license from Cardionics of Webster, TX, and are not to be used for commercial purposes outside the context of the SMART STAT patient simulator program.

The SMART STAT airway feature is designed to function as a human would. The SMART STAT “senses” the location of the ET tube based upon the location of the tube and the volume/pressure of the air given during ventilation.

The silicone **CNS Head**, offers advanced intubation and airway maintenance that also incorporates cholinesterase inhibitor toxin reactions, such as constricted pupils, excessive lacrimation, and coughing. There are dilated pupils with multiple reactions, foaming at the mouth, and voice responses. Lips that show cyanosis and CO poisoning, tongue edema, laryngospasm, and upper teeth that will dislodge after suffering too much laryngoscopic pressure, and trachea anatomy that enhances cricothyrotomy skills. All airway adjuncts used in the field can be used for ventilation of the patient simulator. The voice sounds recorded are limited on the initial programming.

IM injection sites are located on the deltoid and vastus lateralis (right side only) muscle groups. Medication lists (page 38) are established on the iPad® to track the practitioner's injections. You can update or alter this list on the iPad® Medications list.

CPR activities are shown on the student recording by two entries keyed in the Event log by the instructor during a student session. These entries are CPR Start and CPR Stop. There is no recording feature in this simulator. Proper compressions are rewarded with ECG artifact and carotid pulses. Ventilations via BVM will be evaluated on the chest rise associated with adequate seal and application of the BVM.

Bleeding Moulages: Bleeding commences when the ‘Venous Pressure’ block is checked on the B/P Screen. (Moulage set up; see section Bleeding Moulages)

Abdominal anomalies may be ascertained from four-quadrant abdominal sound locations and stomach distention when incorrect intubation or excessive pressure ventilations are given.

The abdominal sounds associated with SMART STAT patient simulator are used under license from Cardionics of Webster, TX, and are not to be used for any commercial purpose outside of the context of the SMART STAT patient simulator programming.

Pericardiocentesis may be performed at the Xiphoid process angle with the expectation of fluid return if such fluids are supplied by the instructor. There is no ECG function associated with this feature, although the instructor can initiate a PVC at will on the heart screen of the PPC.

Care and Cleaning:

This patient simulator utilizes rugged construction however, when you use a patient simulator you should handle SMART STAT carefully and encourage others to do the same.

Keep it clean with normal household detergents and water; do not soak any part of it. Use a damp rag or sponge to wipe it clean. Ink and fake blood products will stain and cannot be removed. Use a towel to dry off the manikin before you store it.

Emptying the reservoirs and ports before storage will prevent biological growth. Have a bucket of warm to hot water available and an empty container for receiving flushed liquids. Flush any tubing that contains a solution, be it blood or soap; build-up of these substances due to the lack of flushing will eventually cause occlusion or feature failure.

The fluid reservoirs reside outside of the electrical circuitry box. The reservoirs are sealed to add protection against moisture leaks. You cannot remove fluid by opening them. There is no danger using the various fluids with this patient simulator when used as directed.

Ports

1. With the supplied syringe empty, and connected to the selected feature port, withdraw any fluid present in the reservoir by opening the port vent and pulling back on syringe plunger.
2. Discharge the syringe into the empty bucket.
3. Repeat as necessary to remove as much of the solution as possible.
4. Use clear, warm water to fill the reservoir and flush the fluids all the way to the feature exit, i.e., at the nose port, flush till you see clear fluid at the nose.
5. Withdraw this fluid from the reservoir. This will assist in removing residue from the reservoir. Repeat step 1 through 5 until clear
6. With an empty syringe and the plunger positioned for maximum air within the syringe, push air into the filling port to force out any remaining moisture.
7. Repeat as necessary to ensure that the feature is moisture-free.

Reservoirs

1. Push clear, warm water through the reservoirs and out the feature location to flush out any contaminants. Have materials available to soak up the exiting fluid. Continue flushing until the fluid is clear fluid.
2. Withdraw the fluid from the reservoir as in step 1 above.

Removing Chest Tube Fluid:

1. Locate the insertion site in the mid-axillary line of the 5th intercostals space
2. Adequately lubricate the chest tube to slide it into the insertion port
3. Insert a chest tube into one side of the manikin
4. Rock the manikin gently from side to side to encourage fluid displacement
5. Remove the tubing
6. Complete dry the manikin and chest tube port before storing.

Removing Blood: The simulator has two metal blood ports; one is for adding fluid and port B is for removing blood.

Open the air vent for the blood system.

Use port B and the syringe to remove blood from the veins utilizing the emptying ports steps 1 through 5.

NOTE: The IV vein system is best drained and flushed by using the “extra tubing method” described in circulate blood (see Fluid ports, filling).

It is also convenient to go to the screen and tap the box for blood flow. After the veins are flushed with clear fluid, use the syringe to force air through the system. If you have used the optional bleeding leg, also flush this unit using same procedure. After flushing the leg, disconnect the knee pin and the tubing connector to store the leg. Always wipe down any spilled fluid and dry it before storing.

CAUTION: Institute a warning system if CDC protocol disinfecting fluids are left in the reservoirs to prevent biological growth. Disinfecting fluids must be flushed before using the manikins.

Store your SMART STAT in a supine position. Avoid standing the unit upright for storage. The case will add significant protection, but laying it on a stretcher or backboard is a good option. The best recommendation for the storage temperature range is a human-friendly environment. Hot storage area makes the manikin’s skin become very pliable. Storage areas colder than 65 degrees F, will need to place the manikin in a warmer environment for fifteen to twenty minutes prior to use. Plastics become brittle in low temperatures, and can be damaged. When using the manikin outside in lower temperatures, be aware of these characteristics and handle accordingly.

NOTE: When operating the SMART STAT in freezing temperatures do not use fluids without due consideration.

Protect the manikin from extreme weather treat SMART STAT like a human and remove him, cover him, or take him inside. In cold environment training it is recommended that the manikin be dressed as a normally active adult would dress.

This manikin is not intended for rescue breathing techniques involving human contaminants. If contamination occurs, use CDC type protocols and agents to ensure that the airway is free from biological agents before use or storing. To accomplish this decontamination procedure it is best to remove the head and airway from the manikin. Email our Customer Service Department, at info@simulaid.com, to obtain instructions.

Replacement Parts:

Consumable part numbers and prices can be obtained from a Simulaids' distributor or Customer Service. You will need your product's serial number to identify the correct parts. Find the serial number under the removable abdominal section; it will be hand written on the torso ledge that holds the abdominal section.

Simulaids manufactures a variety of moulage wounds, which can be applied to your SMART STAT to further enhance your practitioners' experience during training and proficiency sessions. Find it on the web at <http://www.simulaids.com/casualty.htm>.

Item Number	Description	Item Number	Description
302	Arm Injection Site 4 Pack	423	Pneumothorax Replacement Pads 4 Pack
303	Replacement Teeth Set of 3	497	Male Genitalia Smart Stat
304	Reservoir Bag	498	Female Genitalia Smart Stat
101	IV Vein Kit	436	SS Blood Removal Tube
412	External Jugular Neck Insert 3 Pack	437	Pericardio External Injection Site 5 Pack
413	Sternal Bone Replacement 10 Pack	438	SMART STAT Replacement Shorts Overlay
414	I/O Bone Insert leg 10 Pack	439	SMART STAT Chest Overlay Evaluation
415	Right Hand Skin 4 pack	468	Amputated Bleeding Arm
416	Left Hand Skin 4 pack	481	Xtreme Bleeding Moulage Arm
417	Elbow Skin Right 4 pack	410Wi-Fi	Sim Vital 5-Line Hospital Monitor
419	Elbow Skin Left 4pack	408	Amputated Bleeding Leg
420	Pericardio Internal Injection Site 4 Pack	409	Intraseous Leg
544	Battery Charger	407	Battery Leg
426	Cricothyrotomy Neck Skins 10 Pack	468	Amputated Bleeding Arm
421	I/O Skin leg Replacement 10 Pack	481	Xtreme Bleeding Arm
422	SMART STAT Blood Pressure Cuff Smart Stat	482	Xtreme Bleeding Moulage Leg

Trouble Shooting SMART STAT Patient Simulator:

Energizing it:

Begin your troubleshooting of the patient simulator with checking the electrical supply and connection. Start with the power cord connection to be sure the product responds to energy input. Turn the simulator on with the switch on the left shoulder. If you have function with the power cord, turn the unit off and disconnect the power cord. Then install a battery leg that is charged. Turn the simulator back on. If you do not have a functional manikin at this time, your battery is either not charged or dysfunctional. Revert to the power cord for any further trouble shooting necessary.

Checking the features:

All of the pneumatic features run from the compressor in the right thigh. If you are experiencing difficulties with pneumatic features, check the activity of the air compressor by placing your hand on the thigh. It should be vibrating slightly. Also check the fan in the knee of the right thigh to see that it is spinning. If the air compressor isn't vibrating or the fan is not running, call technical support 800-431-4310.

If the compressor and fan devices are working and the pulses, chest rise, or tongue swelling features, is not working; indications are there may be a problem with the pneumatic switches call for tech support.

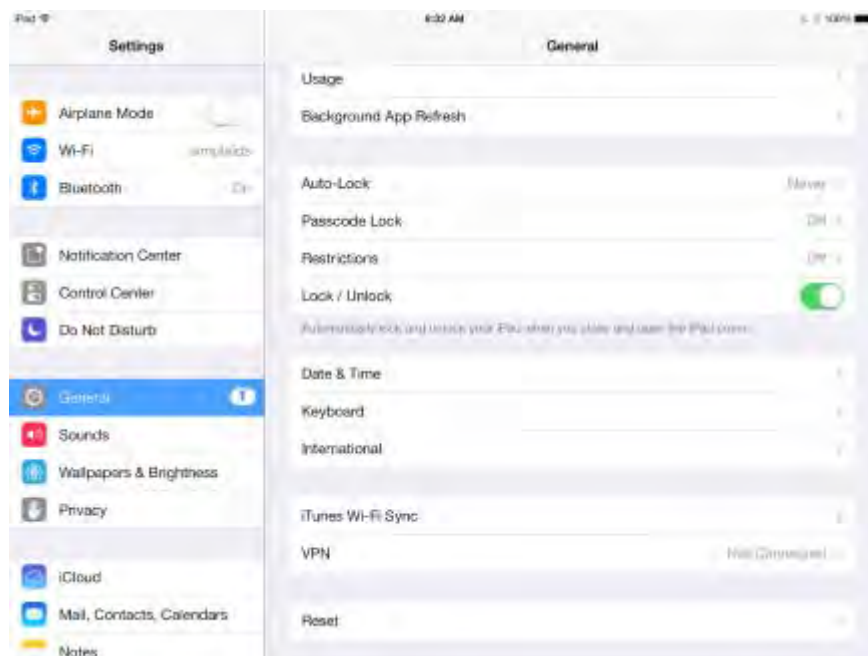
If all of your pneumatic systems are working, but there aren't any ECG patterns, heart sounds or lung sounds or abdominal sounds, call tech support when you are able to identify what features do and do not work.

SMART STAT APP Conflict

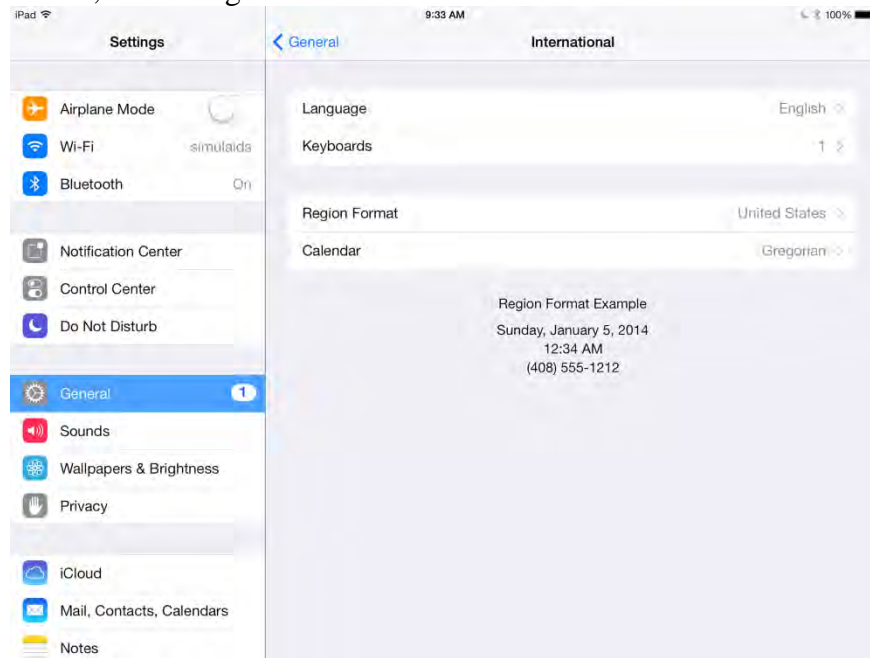
Some settings on the iPad® may cause a conflict with applications. To avoid conflicts, especially for international use outside the United States, it is necessary to keep the international settings as follows:

Go to settings on the iPad® then scroll down to general settings.

Once in the General Settings, scroll the right side down to International.



Once in International, the settings shown on screen should be set to:



Language: English

Keyboard: 1

Region Format: United States

Calendar: Gregorian

WARRANTY: Simulaids warrants this product to be free from defects in materials and/or workmanship for a period of **one** year from the date of purchase, as evidenced by the date on the invoice of the product shipment to the end user. This warranty expressly does not cover abuse, accidental or purposeful damage, or any form of modification to the product. Only products manufactured at the Simulaids plant in Saugerties, NY receive this limited warranty status. All other products, including certain electrical components sold through Simulaids, but manufactured elsewhere, are subject to the manufacturer's warranty. These warranties may differ from the Simulaids' warranty.

EXTENDED WARRANTY PROGRAM: There is an extended warranty program available to you to purchase within the first two (2) months of your purchase of SMART STAT. Obtain more information about this option through your sales representative or by calling 800-431-4310 or 845-679-2475 to speak with Customer Service, or find the information at www.simulaids.com.

RETURN POLICY: Simulaids reserves the right to either repair or replace affected parts or the entire unit, at their sole discretion, after investigating and reviewing the actual product and the damage. In most instances, a digital photo of the product in question showing the damage and sent to info@simulaids.com will help qualify a product for return to the factory. At no time will any product be accepted without proper return authorization issued by Simulaids. Please contact our Customer Service Department to arrange a return and obtain a RA number. Freight and Shipping charges are the sole responsibility of the end user. No product will be received with shipping charges due. The serial number of the simulator and the invoice number from the agency through whom the product was purchased must be provided for warranty repairs. No return authorization number will be provided without this information. Should you have any questions or wish further information on any product we manufacture, call or write our Customer Service Department. The hand written serial number of SMART STAT can be found under the abdominal section on the torso ledge.

Glossary of Terms

CNS – Refers to the Central Nervous System pertinent to the head features on the SMART STAT.

Friendly Name – The particular code applied to a Blue Tooth™ device that is recognized, or friendly with the SMART STAT programming

iPad®—the Apple® tablet used as a controller for the SMART STAT.

On-the-fly – A term used to designate the operation of the controller, to change at will, the patient simulator features.

Recording – The results of a session shown by date and time under a student's/team name.

Scenario – A list of chronological happenings that will change the physiological features of the manikin.

Session – The activity of an instructor monitoring the patient simulator during a student or team of students assesses and treats a patient.

SMART STAT – Scenario-based, Medically Advanced Resuscitation Trainer in our STAT line of patient simulators

Student List – The master file on the iPad®, that the instructor creates for any number of students to be available on the iPad® for selection during Sessions.

Vignette—a small section of a scenario so that many options are available within a given scenario.

Nursing Assessment 16

Date: TODAY Time: 1 HOUR AGO Perez, Juanita DOB: 05/21/19xx
 Height: 5' 0" in Weight: 140 lbs SEBER, MD MRN: 008563574
 Age: 32 yrs Gender: female

Body System	Assessment of Function	Test/Measure	Observation of Findings
EENT	PERLA	X	A
	Blephar	X	A
	Orbit/ocular	X	A
Neurological	Eye/oculomotor	X	A
	Speech/Coordination	X	AD X3
Cardiovascular	Pulses Regular	X	A
	Capillary Refill < 3 sec	X	A
Pulmonary/Respiratory	Wheezing	X	A
	Spontaneous	X	A

Simulaids Education Juanita Perez – OB Preeclampsia



Discussion Questions

- How well did the team communicate? Did you use SBAR?
 - With each other? With the patient/family?
 - With the physician / interdisciplinay team?
- How effective was the initial assessment of this patient?
 - How to organize assessment head to toe versus focused, ABC-D (D= devices, discomfort, danger, disability, drugs, neuro status)
 - Key data missed?
 - Effectiveness?

Actor Cards 16

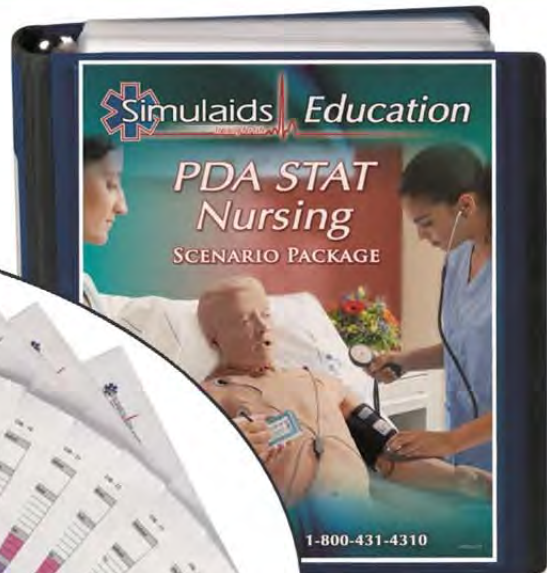
ROLE # 1: Patient / Mankin

MOULAGE INSTRUCTIONS

Down Headache 6/10
 Prone Fetal monitoring belts over gown
 IV in REA
 Hypertensive if checked

Time	Scene	Introduction
00-00		
	VOCALS	ACTIONS
	"What's going on?"	Lying in bed
	"DOB 05/21/19xx"	Anxious / concerned
	"My name is Juanita Perez."	
00-09		Scene two
	VOCALS	ACTIONS
	"What are you doing?"	Lying in bed
	"How is my baby?"	Anxious / concerned
	"Is that bad?" (good?)	
00-10		Scene three
	VOCALS	ACTIONS
	"I haven't feel my baby move."	Lying in bed
	"I used the bathroom earlier. Did you need to test my urine?"	Anxious / concerned
		Can be repositioned if directed
00-15		Scene four
	VOCALS	ACTIONS
	(concerned)	Lying in bed
		Anxious / concerned
		Can be repositioned if directed
00-20		Scene five
	VOCALS	ACTIONS
	"What's happening?"	Lying in bed
	"What are you doing?"	Anxious / concerned
	"Is everything ok?"	
	"What did the doctor order?"	
00-25		Scene six
	VOCALS	ACTIONS
		End scenario

Nursing Scenarios



EMS Scenarios



more training aids at simulaids.com

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info@simulaids.com – simulaids.com