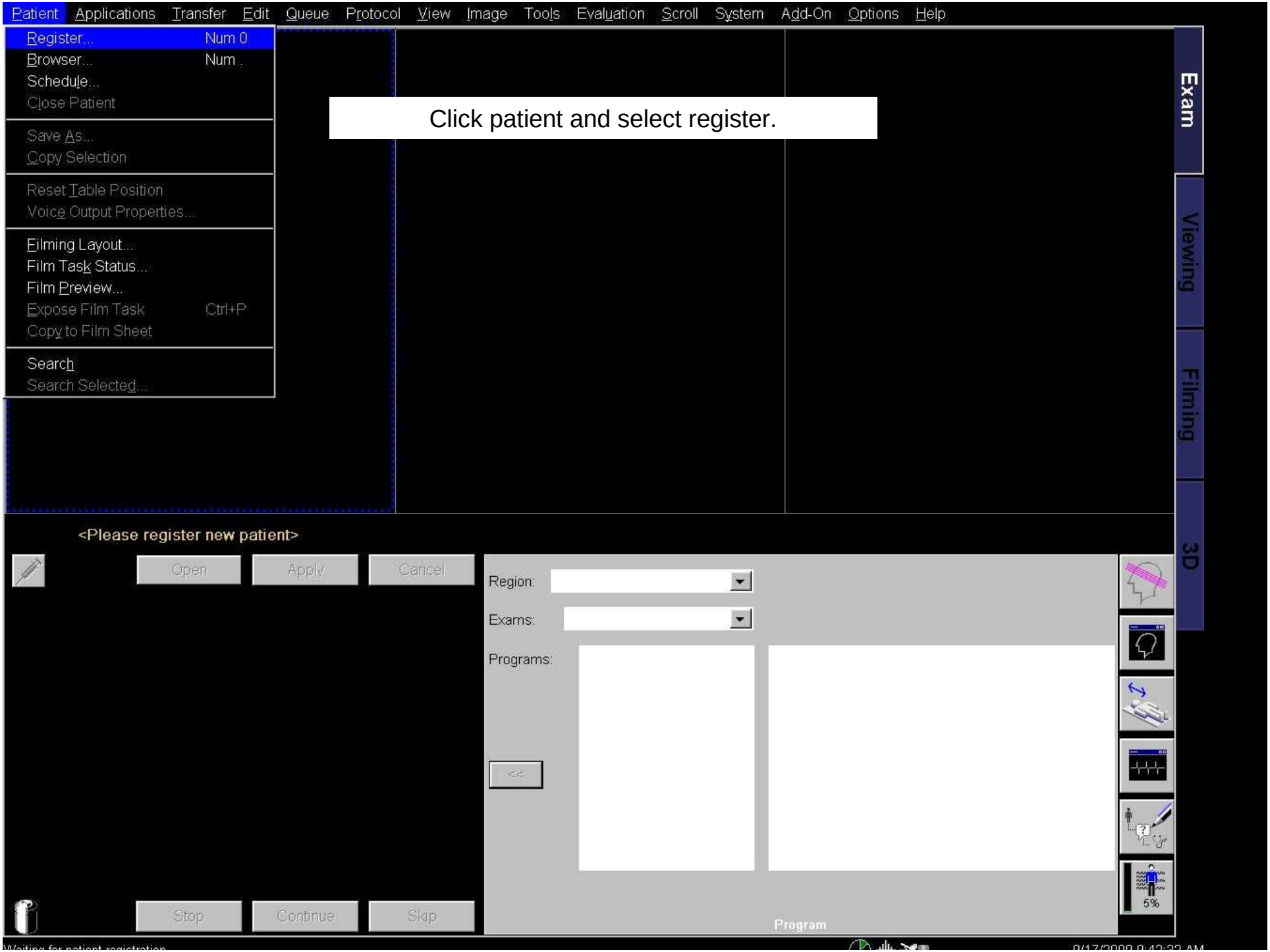
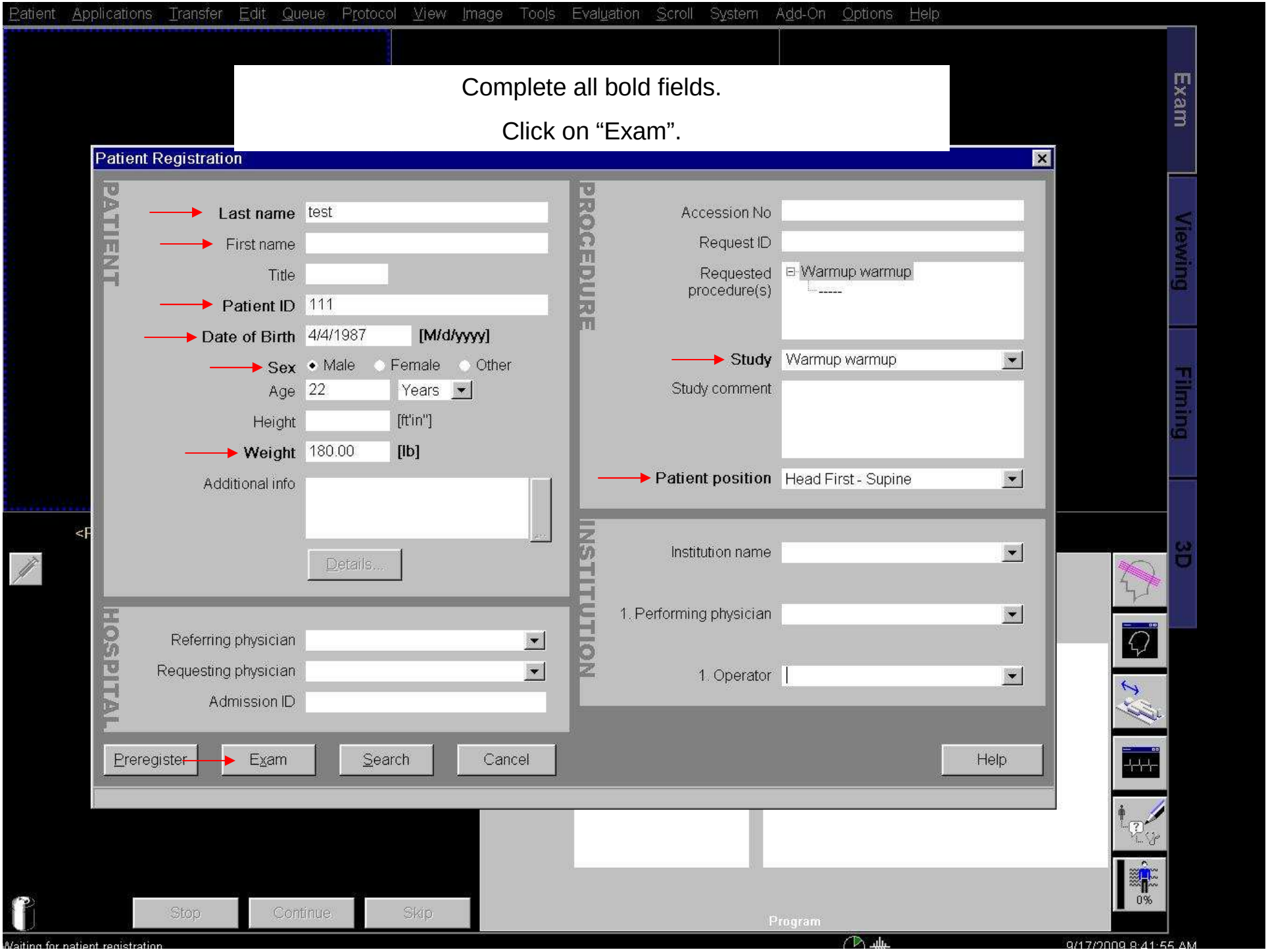
TIM TRIO

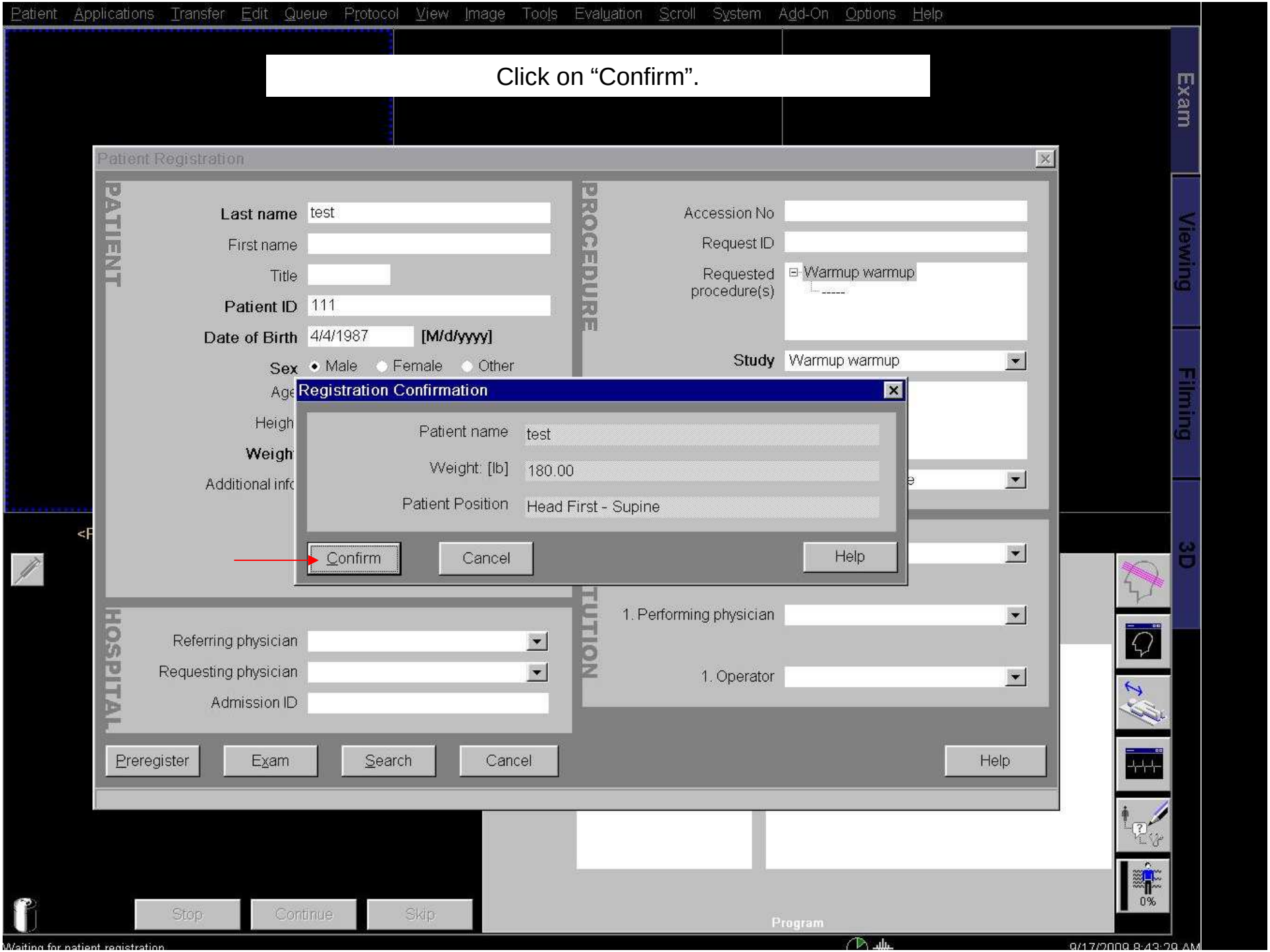
Basic Scan Procedure

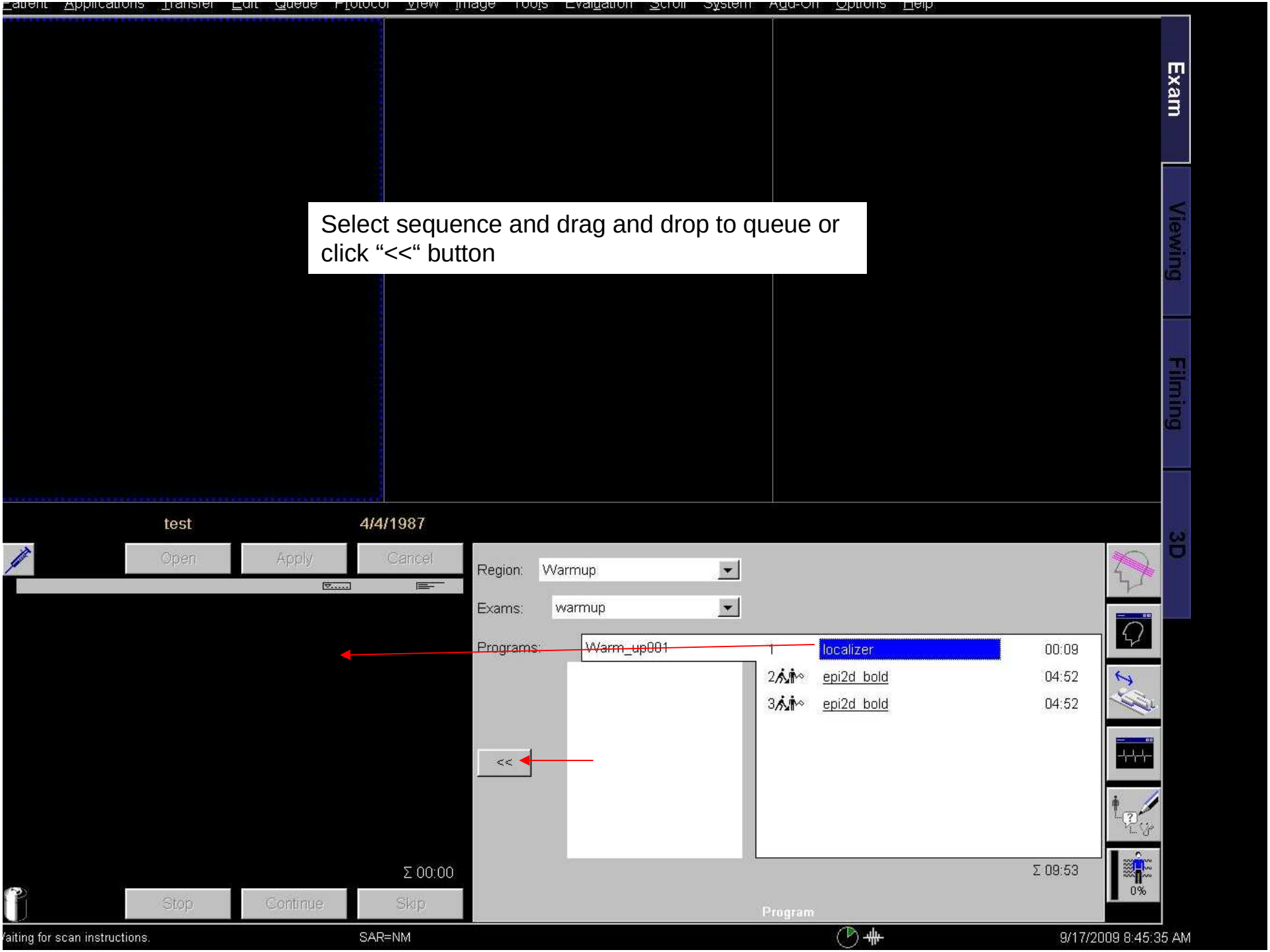
Scan Procedure

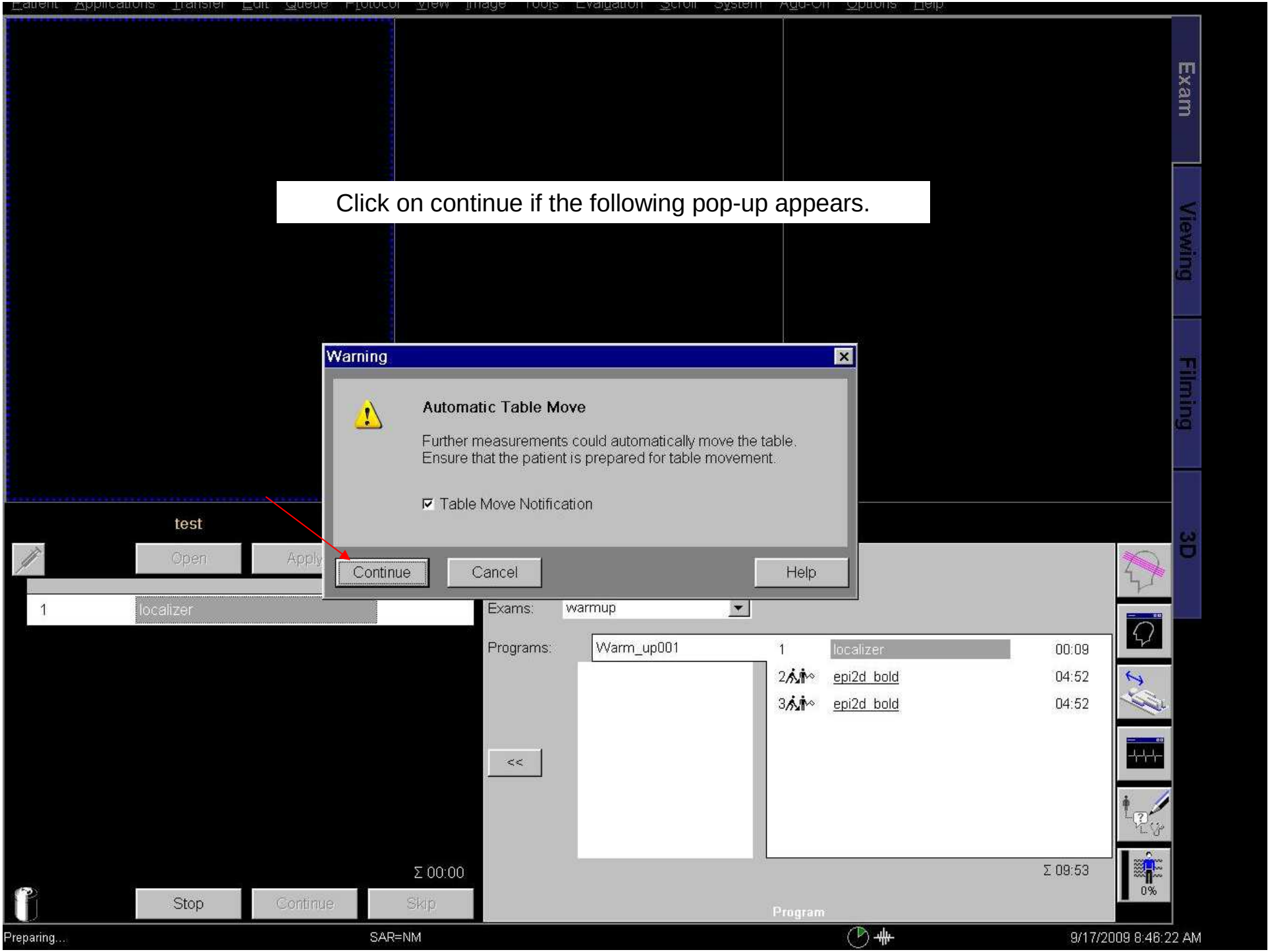
- The scan procedure has not changed much with the TIM TRIO system. You may notice that there are some pop-menus that you have not seen on the previous TRIO system.
- Also some of the pop-up menus, although are the same as the TRIO, it just looks different. The following pages goes through the basic scan procedure.
- Always remember to register your subject first before you position and landmark. If you don’t the scan location on the LCD display will change from your original landmark without notice.

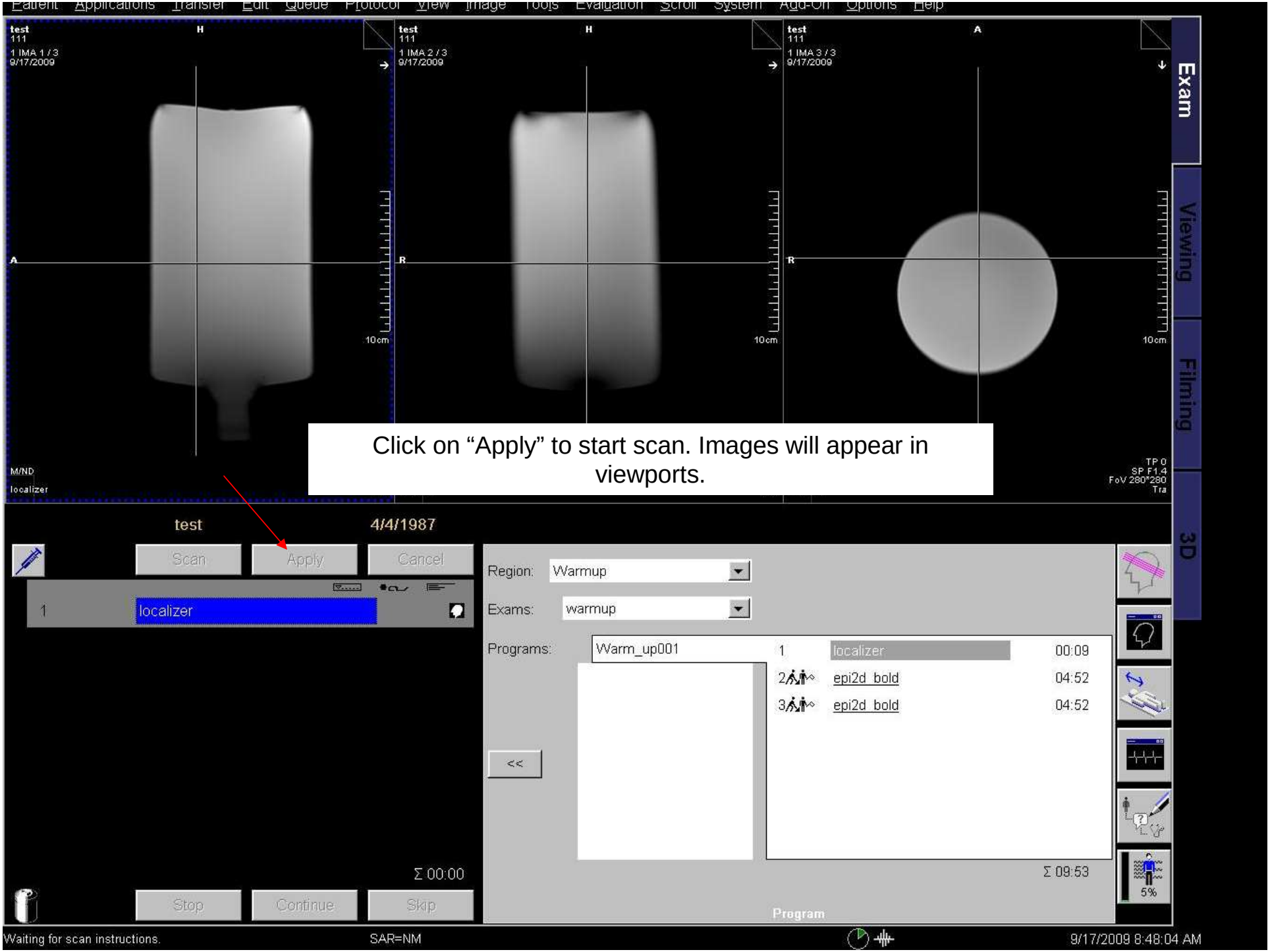

Patient Applications Transfer Edit Queue Protocol View Image Tools Evaluation Scroll System Add-On Options Help
Register... Num 0
Browser... Num .
Schedule...
Close Patient
Save As...
Copy Selection
Reset Table Position
Voice Output Properties...
Filming Layout...
Film Task Status...
Film Preview...
Expose Film Task Ctrl+P
Copy to Film Sheet
Search
Search Selected...
Click patient and select register.
Exam
Viewing
Filming
3D
<Please register new patient>
Open
Apply
Cancel
Region:
Exams:
Programs:
<<
Stop
Continue
Skip
5%
Program

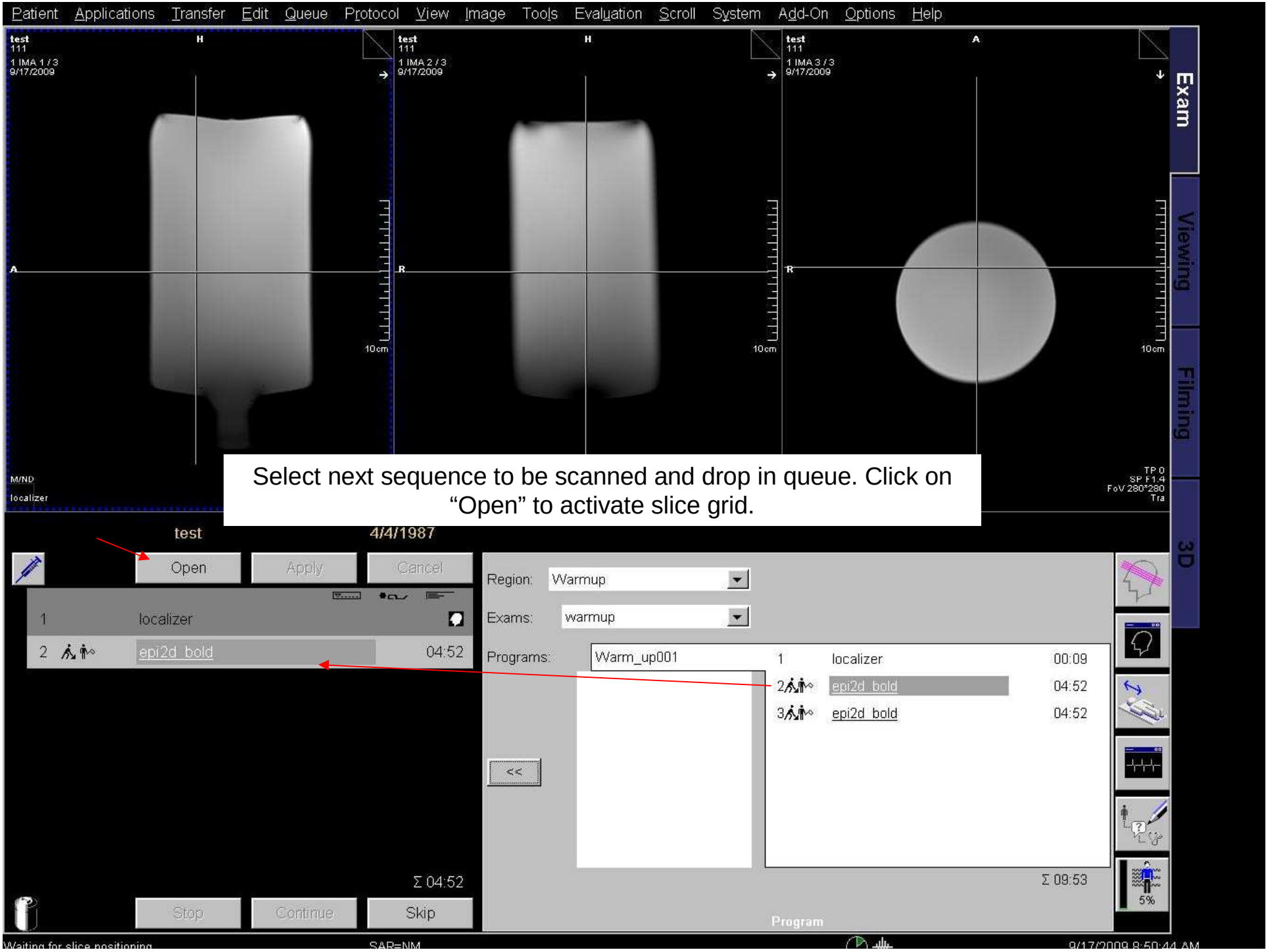

Patient Applications Transfer Edit Queue Protocol View Image Tools Evaluation Scroll System Add-On Options Help
Complete all bold fields.
Click on “Exam”.
Exam
Viewing
Filming
3D
Patient Registration
PATIENT
Last name test
First name
Title
Patient ID 111
Date of Birth 4/4/1987 [M/d/yyyy]
Sex Male Female Other
Age 22 Years
Height [ft'in"]
Weight 180.00 [lb]
Additional info
Details...
HOSPITAL
Referring physician
Requesting physician
Admission ID
PROCEDURE
Accession No
Request ID
Requested procedure(s) Warmup warmup
Study Warmup warmup
Study comment
Patient position Head First - Supine
INSTITUTION
Institution name
1. Performing physician
1. Operator
Preregister Exam Search Cancel Help
Stop Continue Skip
Program
0%
Waiting for patient registration
9/17/2009 8:41:55 AM

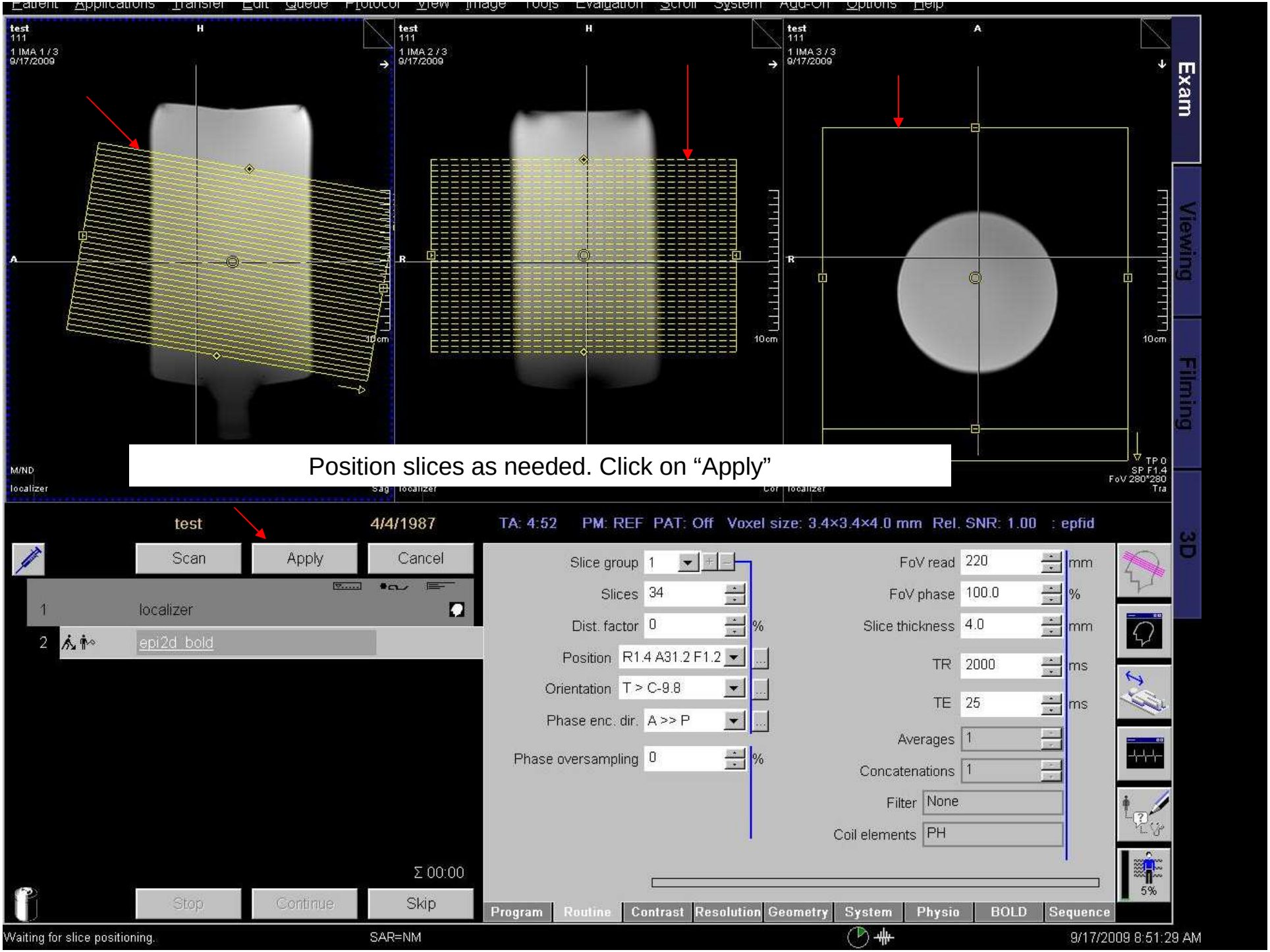

Click on “Confirm”.
Patient Applications Transfer Edit Queue Protocol View Image Tools Evaluation Scroll System Add-On Options Help
Exam
Viewing
Filming
3D
Patient Registration
PATIENT
Last name test
First name
Title
Patient ID 111
Date of Birth 4/4/1987 [M/d/yyyy]
Sex Male Female Other
PROCEDURE
Accession No
Request ID
Requested procedure(s) Warmup warmup
Study Warmup warmup
Registration Confirmation
Patient name test
Weight: [lb] 180.00
Patient Position Head First - Supine
Confirm
Cancel
Help
HOSPITAL
Referring physician
Requesting physician
Admission ID
TUTION
1. Performing physician
1. Operator
Preregister
Exam
Search
Cancel
Help
Stop
Continue
Skip
Program
0%
Waiting for patient registration
9/17/2009 8:43:29 AM

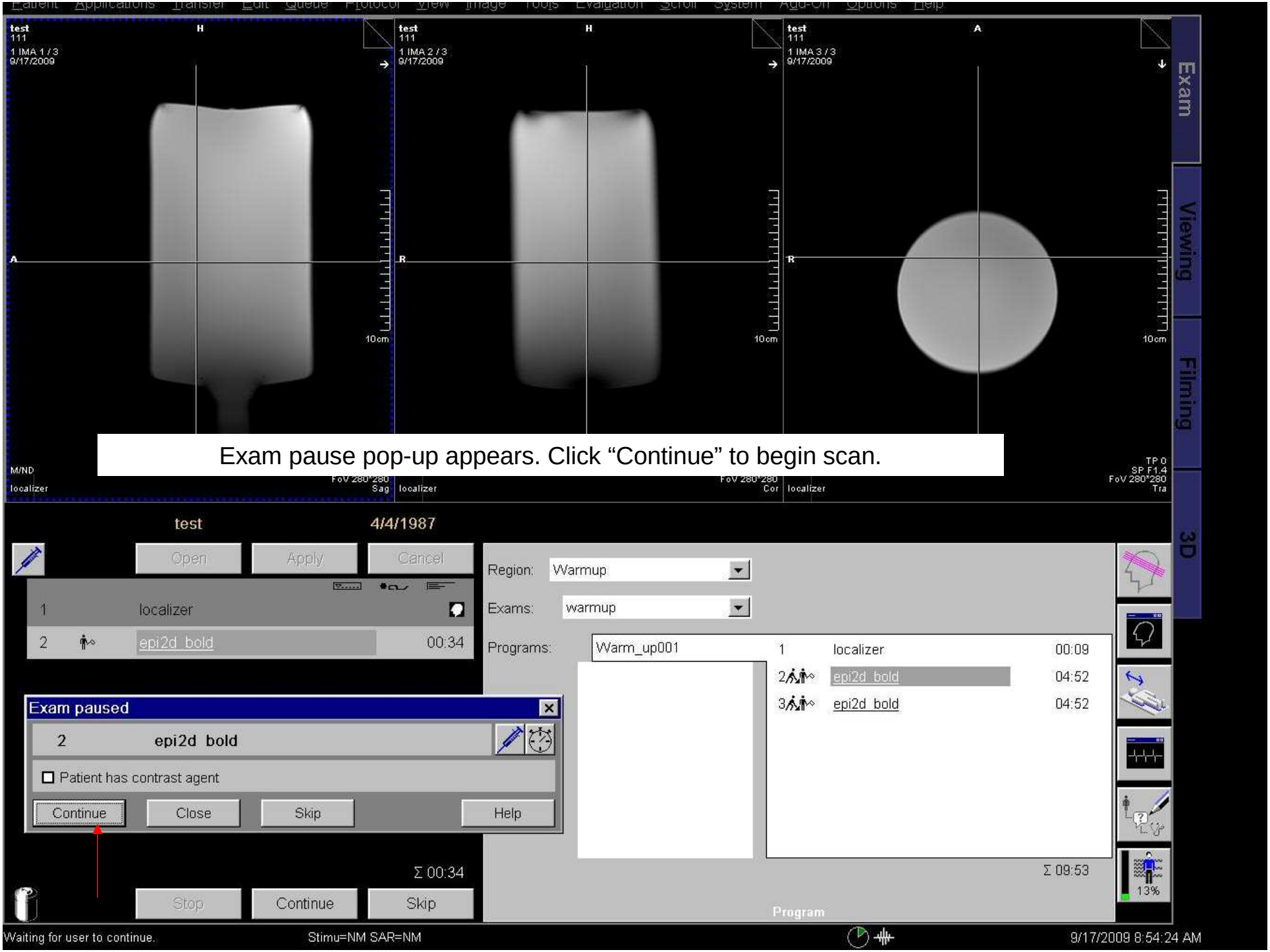

Patient Applications Transfer Edit Queue Protocol View Image Tools Evaluation Scroll System Add-On Options Help
Exam
Viewing
Filming
3D
Select sequence and drag and drop to queue or click “<<“ button
test
4/4/1987
Open
Apply
Cancel
Region: Warmup
Exams: warmup
Programs: Warm_up001
1 localizer 00:09
2 epi2d_bold 04:52
3 epi2d_bold 04:52
<<
Σ 00:00
Σ 09:53
Stop
Continue
Skip
Program
0%
Waiting for scan instructions.
SAR=NM
9/17/2009 8:45:35 AM

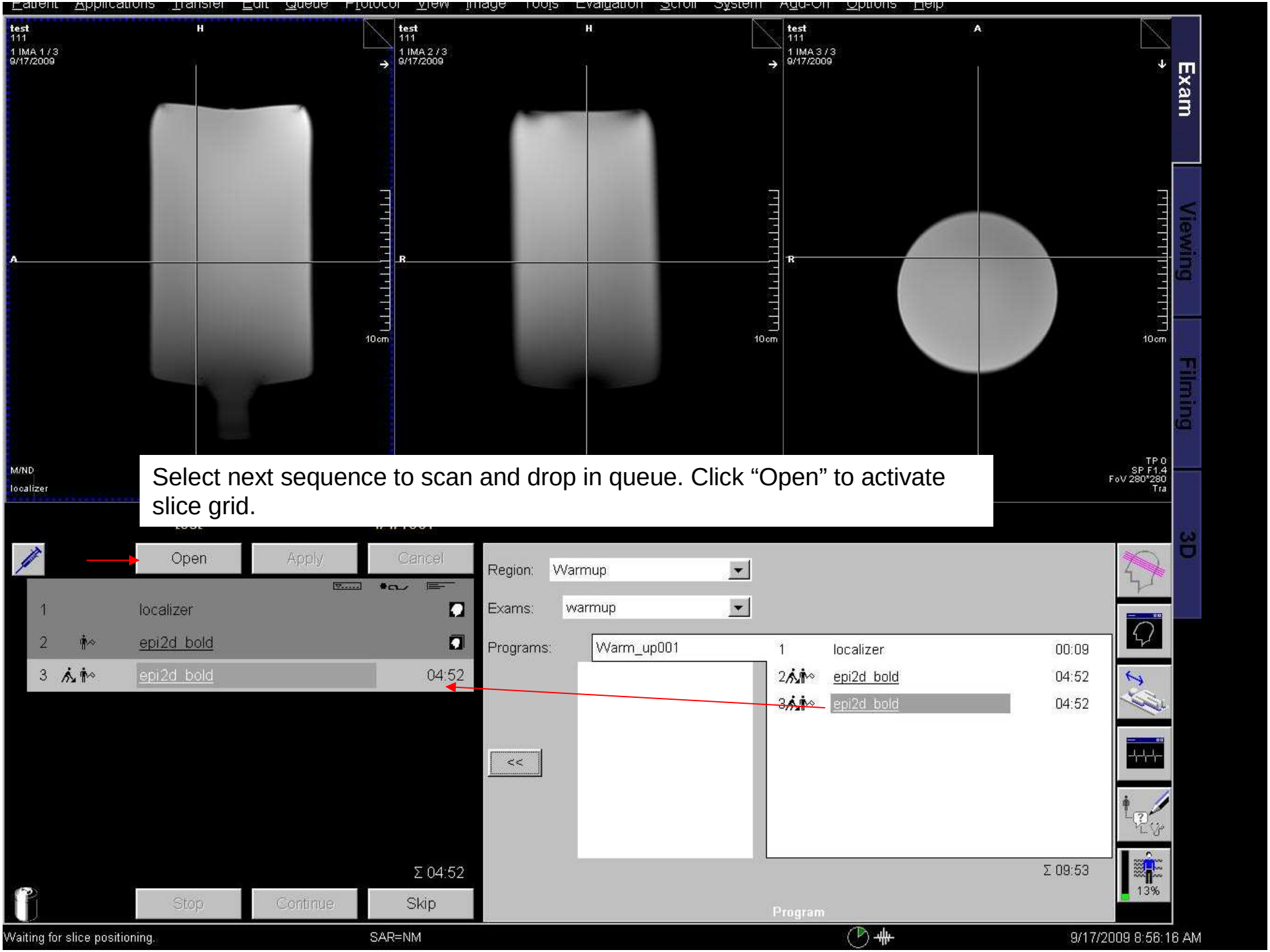

Click on continue if the following pop-up appears.
Warning
Automatic Table Move
Further measurements could automatically move the table.
Ensure that the patient is prepared for table movement.
Table Move Notification
Continue
Cancel
Help
Exam
Viewing
Filming
3D
test
Open
Apply
1
localizer
Exams:
warmup
Programs:
Warm_up001
1 localizer 00:09
2 epi2d_bold 04:52
3 epi2d_bold 04:52
<<
Σ 00:00
Σ 09:53
Stop
Continue
Skip
Program
0%
Preparing...
SAR=NM
9/17/2009 8:46:22 AM

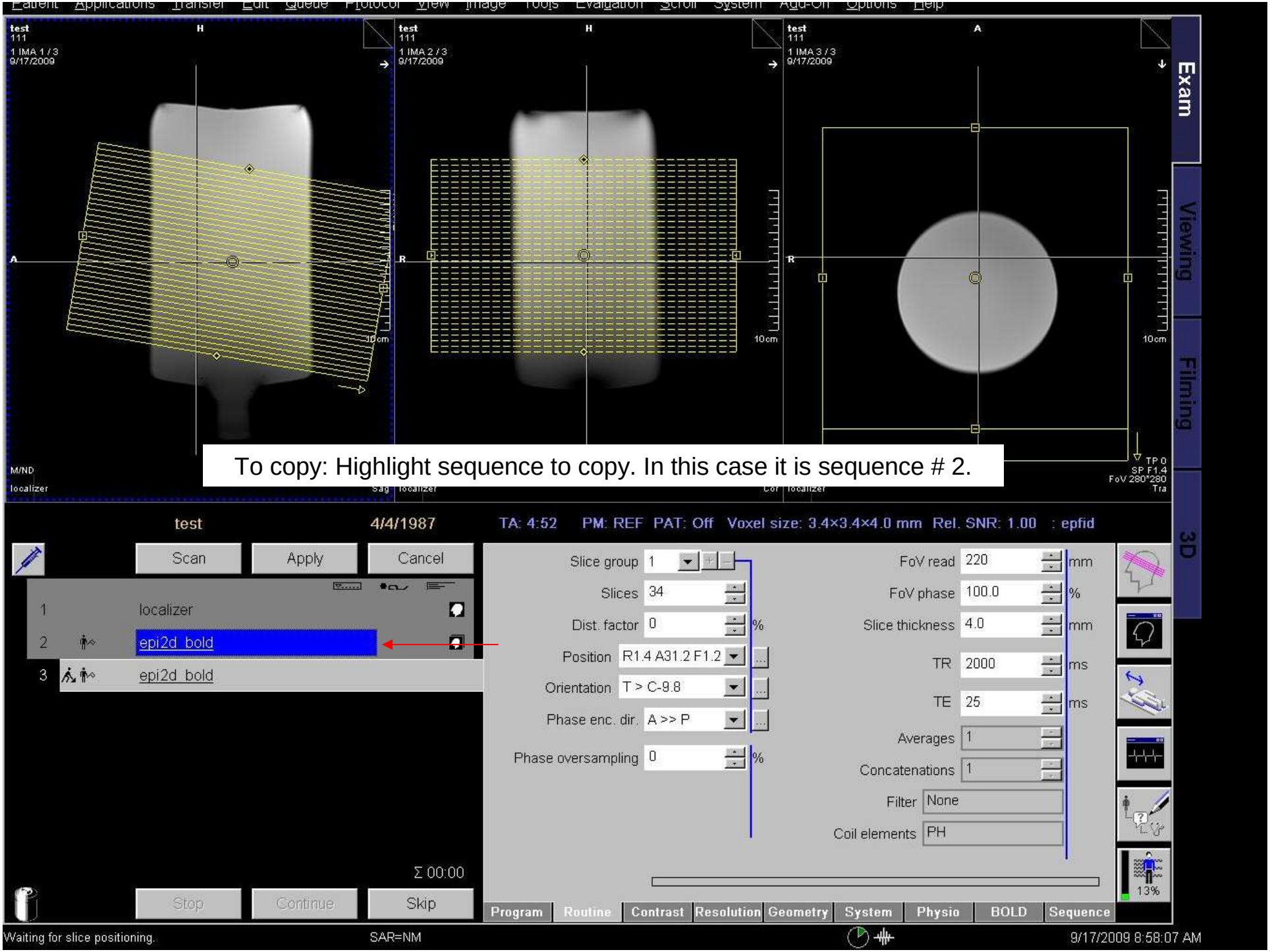

Patient Applications Transfer Edit Queue Protocol View Image Tools Evaluation Scroll System Add-On Options Help
test
111
1 IMA 1 / 3
9/17/2009
H
A
10cm
test
111
1 IMA 2 / 3
9/17/2009
H
R
10cm
test
111
1 IMA 3 / 3
9/17/2009
A
R
10cm
Exam
Viewing
Filming
3D
M/ND
localizer
TP 0
SP F1.4
FoV 280*280
Tra
Click on “Apply” to start scan. Images will appear in viewports.
test
4/4/1987
Scan
Apply
Cancel
1
localizer
Region:
Warmup
Exams:
warmup
Programs:
Warm_up001
1
localizer
00:09
2
epi2d_bold
04:52
3
epi2d_bold
04:52
<<
Σ 00:00
Σ 09:53
Stop
Continue
Skip
Program
5%
Waiting for scan instructions.
SAR=NM
9/17/2009 8:48:04 AM

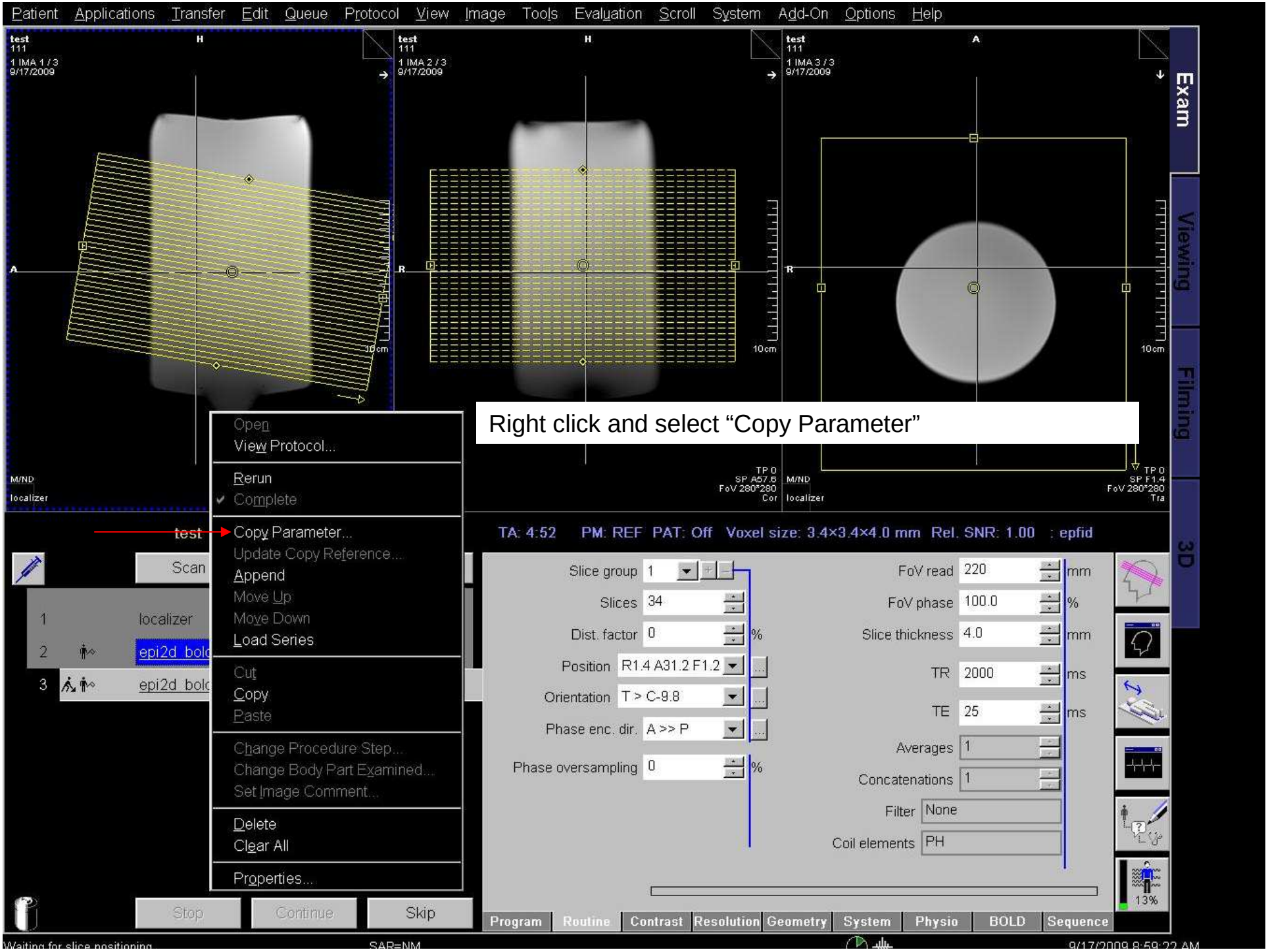

Patient Applications Transfer Edit Queue Protocol View Image Tools Evaluation Scroll System Add-On Options Help
Exam
Viewing
Filming
3D
Select next sequence to be scanned and drop in queue. Click on "Open" to activate slice grid.
test
4/4/1987
Open
Apply
Cancel
1 localizer
2 epi2d_bold 04:52
Σ 04:52
Stop
Continue
Skip
Region: Warmup
Exams: warmup
Programs: Warm_up001
1 localizer 00:09
2 epi2d_bold 04:52
3 epi2d_bold 04:52
Σ 09:53
Program
5%
Waiting for slice positioning
SAR=NM

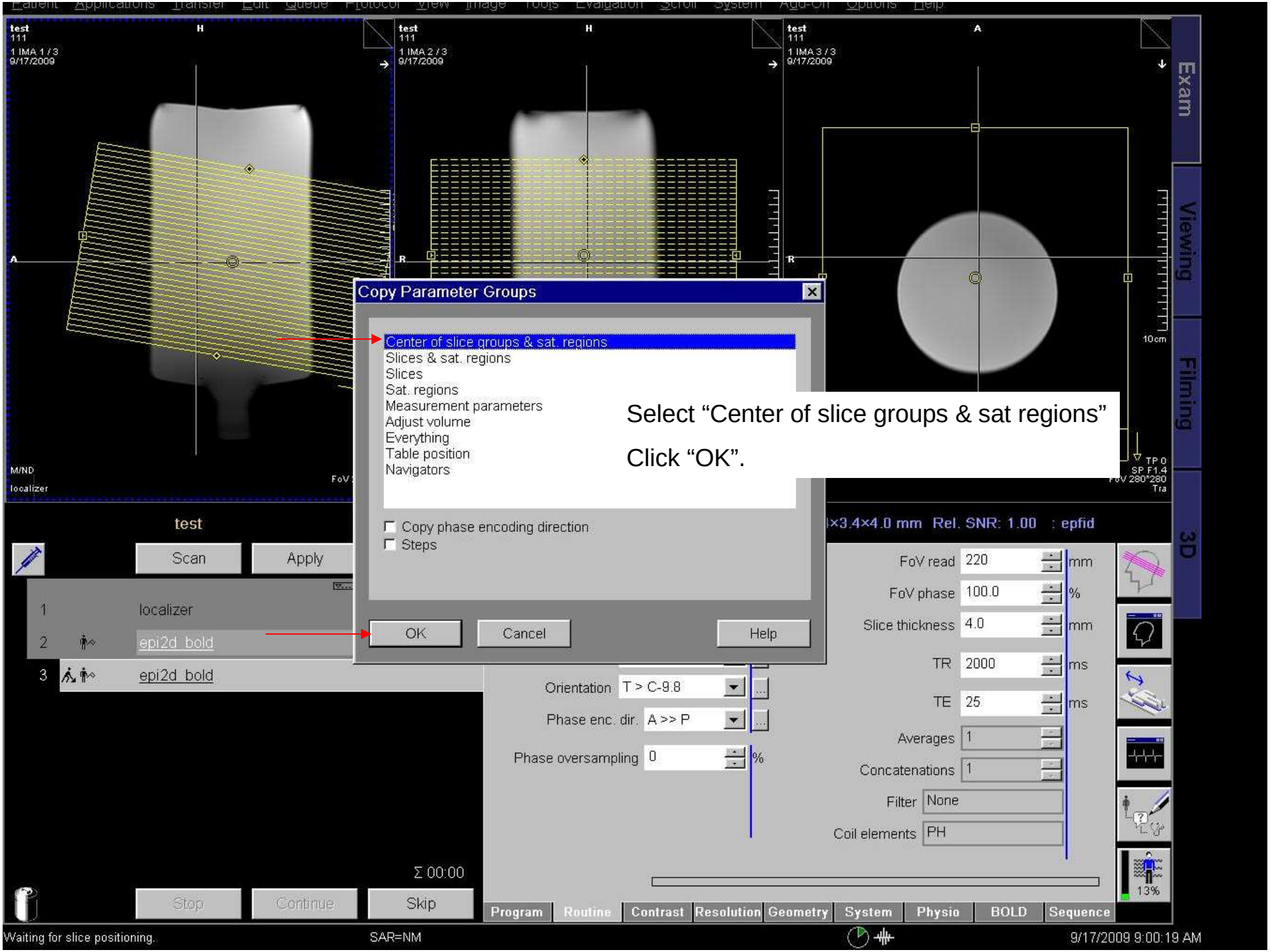

Exam
Viewing
Filming
3D
test
111
1 IMA 1 / 3
9/17/2009
1 IMA 2 / 3
1 IMA 3 / 3
10cm
M/ND
localizer
TP 0
SP F1.4
FoV 280*280
Tra
Position slices as needed. Click on “Apply”
test
4/4/1987
TA: 4:52 PM: REF PAT: Off Voxel size: 3.4×3.4×4.0 mm Rel. SNR: 1.00 : epfid
Scan
Apply
Cancel
1 localizer
2 epi2d_bold
Slice group 1
Slices 34
Dist. factor 0 %
Position R1.4 A31.2 F1.2
Orientation T > C-9.8
Phase enc. dir. A >> P
Phase oversampling 0 %
FoV read 220 mm
FoV phase 100.0 %
Slice thickness 4.0 mm
TR 2000 ms
TE 25 ms
Averages 1
Concatenations 1
Filter None
Coil elements PH
Σ 00:00
Stop
Continue
Skip
5%
Program
Routine
Contrast
Resolution
Geometry
System
Physio
BOLD
Sequence
Waiting for slice positioning.
SAR=NM
9/17/2009 8:51:29 AM

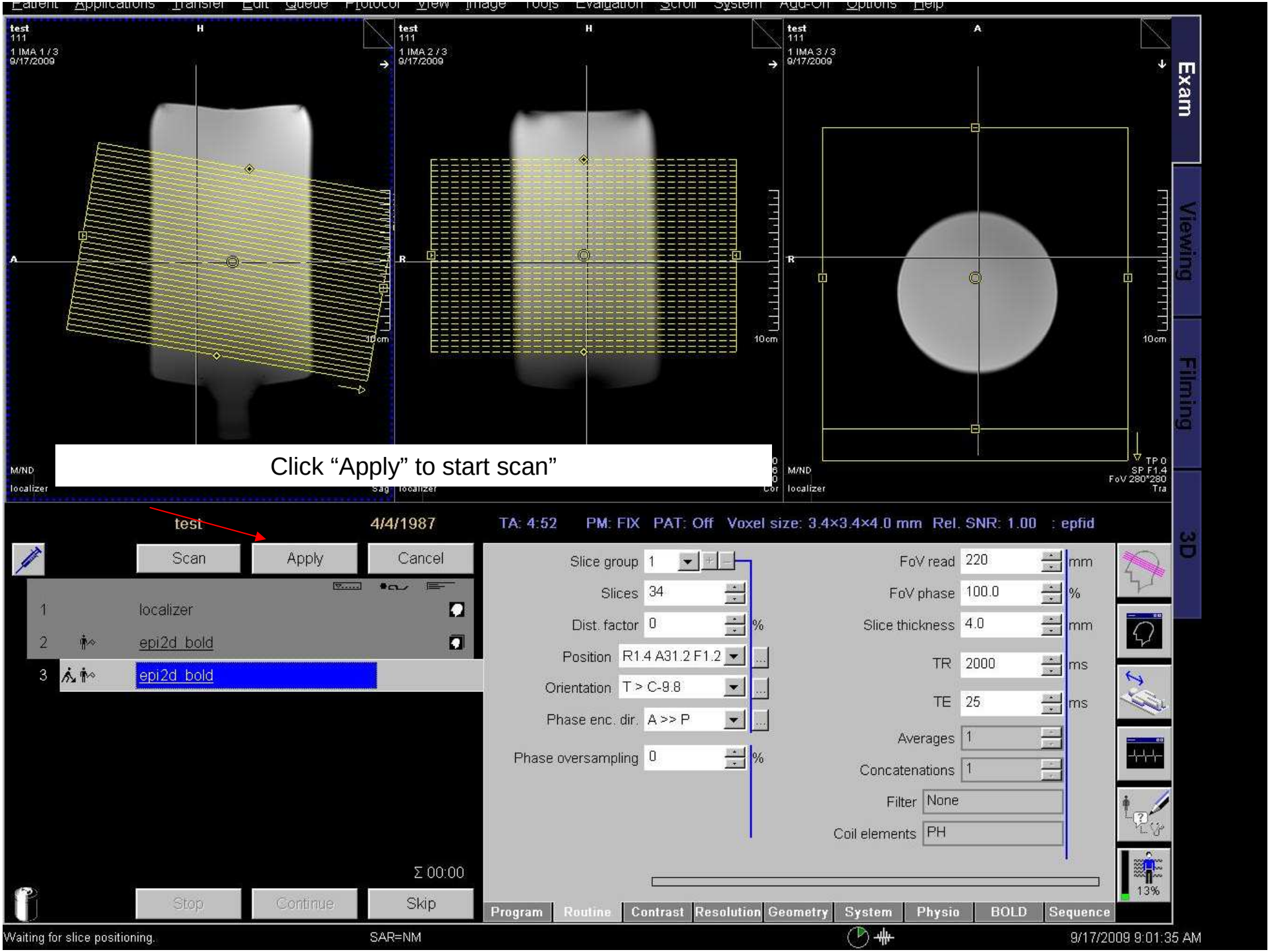

Exam pause pop-up appears. Click “Continue” to begin scan.
Exam
Viewing
Filming
3D
test
4/4/1987
Open
Apply
Cancel
1 localizer
2 epi2d_bold 00:34
Region: Warmup
Exams: warmup
Programs: Warm_up001
1 localizer 00:09
2 epi2d_bold 04:52
3 epi2d_bold 04:52
Σ 09:53
Exam paused
2 epi2d_bold
Patient has contrast agent
Continue
Close
Skip
Help
Σ 00:34
Stop
Continue
Skip
Program
13%
Waiting for user to continue.
Stimu=NM SAR=NM
9/17/2009 8:54:24 AM

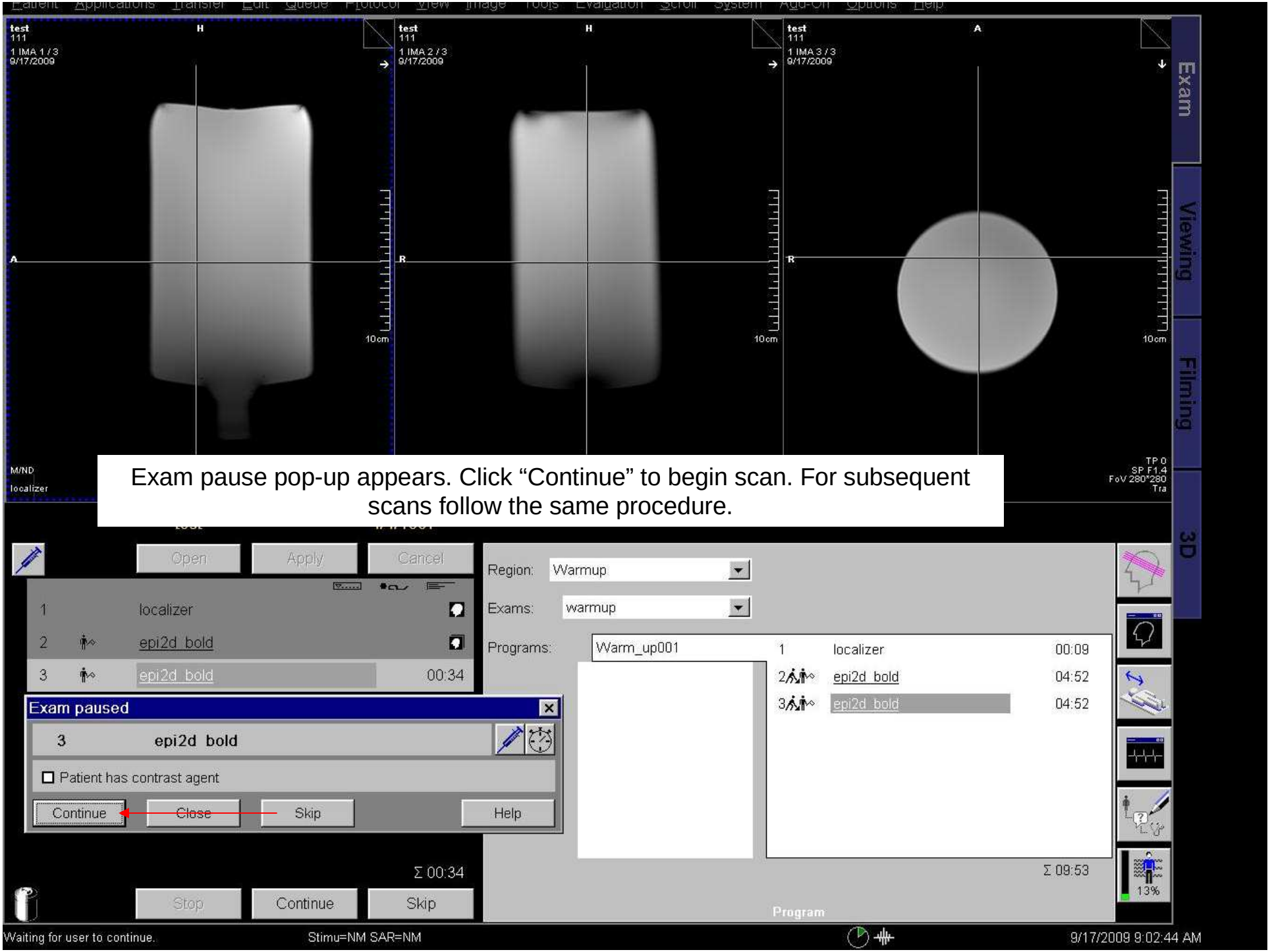

Patient Applications Transfer Edit Queue Protocol View Image Tools Evaluation Scroll System Add-On Options Help
test
111
1 IMA 1 / 3
9/17/2009
H
A
10cm
test
111
1 IMA 2 / 3
9/17/2009
H
R
10cm
test
111
1 IMA 3 / 3
9/17/2009
A
R
10cm
Exam
Viewing
Filming
3D
M/ND
localizer
TP 0
SP F1.4
FoV 280*280
Tra
Select next sequence to scan and drop in queue. Click “Open” to activate slice grid.
Open
Apply
Cancel
1 localizer
2 epi2d_bold
3 epi2d_bold 04:52
Σ 04:52
Stop
Continue
Skip
Region: Warmup
Exams: warmup
Programs: Warm_up001
1 localizer 00:09
2 epi2d_bold 04:52
3 epi2d_bold 04:52
<<
Σ 09:53
Program
13%
Waiting for slice positioning.
SAR=NM
9/17/2009 8:56:16 AM

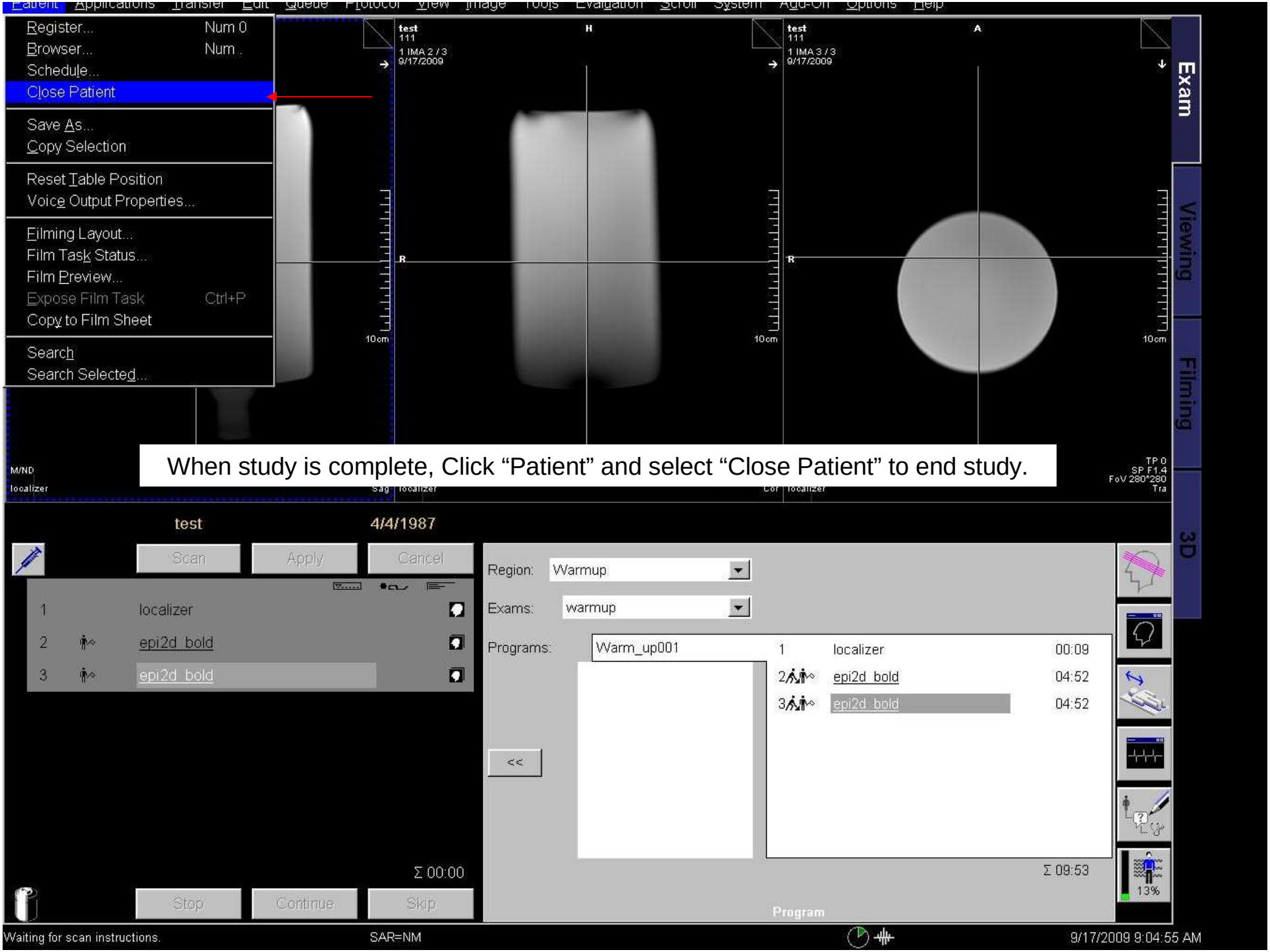

Patient Applications Transfer Edit Queue Protocol View Image Tools Evaluation Scroll System Add-On Options Help
test
111
1 IMA 1 / 3
9/17/2009
1 IMA 2 / 3
1 IMA 3 / 3
Exam
Viewing
Filming
3D
To copy: Highlight sequence to copy. In this case it is sequence # 2.
test
4/4/1987
TA: 4:52 PM: REF PAT: Off Voxel size: 3.4×3.4×4.0 mm Rel. SNR: 1.00 : epfid
Scan
Apply
Cancel
1 localizer
2 epi2d_bold
3 epi2d_bold
Slice group 1
Slices 34
Dist. factor 0 %
Position R1.4 A31.2 F1.2
Orientation T > C-9.8
Phase enc. dir. A >> P
Phase oversampling 0 %
FoV read 220 mm
FoV phase 100.0 %
Slice thickness 4.0 mm
TR 2000 ms
TE 25 ms
Averages 1
Concatenations 1
Filter None
Coil elements PH
Σ 00:00
Stop
Continue
Skip
Program Routine Contrast Resolution Geometry System Physio BOLD Sequence
13%
Waiting for slice positioning.
SAR=NM
9/17/2009 8:58:07 AM


Patient Applications Transfer Edit Queue Protocol View Image Tools Evaluation Scroll System Add-On Options Help
Exam
Viewing
Filming
3D
Right click and select “Copy Parameter”
Open
View Protocol...
Rerun
Complete
Copy Parameter...
Update Copy Reference...
Append
Move Up
Move Down
Load Series
Cut
Copy
Paste
Change Procedure Step...
Change Body Part Examined...
Set Image Comment...
Delete
Clear All
Properties...
TA: 4:52 PM: REF PAT: Off Voxel size: 3.4×3.4×4.0 mm Rel. SNR: 1.00 : epfid
Slice group
Slices
Dist. factor
Position
Orientation
Phase enc. dir.
Phase oversampling
FoV read
FoV phase
Slice thickness
TR
TE
Averages
Concatenations
Filter
Coil elements
Scan
Stop
Continue
Skip
Program
Routine
Contrast
Resolution
Geometry
System
Physio
BOLD
Sequence


Copy Parameter Groups
Center of slice groups & sat. regions
Slices & sat. regions
Slices
Sat. regions
Measurement parameters
Adjust volume
Everything
Table position
Navigators
Copy phase encoding direction
Steps
OK
Cancel
Help
Select “Center of slice groups & sat regions”
Click “OK”.
Exam
Viewing
Filming
3D
test
Scan
Apply
1 localizer
2 epi2d_bold
3 epi2d_bold
FoV read 220 mm
FoV phase 100.0 %
Slice thickness 4.0 mm
TR 2000 ms
TE 25 ms
Averages 1
Concatenations 1
Filter None
Coil elements PH
Orientation T > C-9.8
Phase enc. dir. A >> P
Phase oversampling 0 %
Σ 00:00
Stop
Continue
Skip
Program
Routine
Contrast
Resolution
Geometry
System
Physio
BOLD
Sequence
Waiting for slice positioning.
SAR=NM
9/17/2009 9:00:19 AM


Patient Applications Transfer Edit Queue Protocol View Image Tools Evaluation Scroll System Add-On Options Help
test
111
1 IMA 1 / 3
9/17/2009
H
A
10cm
test
111
1 IMA 2 / 3
9/17/2009
H
R
10cm
test
111
1 IMA 3 / 3
9/17/2009
A
R
10cm
TP 0
SP F1.4
FoV 280*280
Tra
M/ND
localizer
Sag
Cor
Exam
Viewing
Filming
3D
Click “Apply” to start scan”
test
4/4/1987
TA: 4:52
PM: FIX
PAT: Off
Voxel size: 3.4×3.4×4.0 mm
Rel. SNR: 1.00
: epfid
Scan
Apply
Cancel
1 localizer
2 epi2d_bold
3 epi2d_bold
Slice group 1
Slices 34
Dist. factor 0 %
Position R1.4 A31.2 F1.2
Orientation T > C-9.8
Phase enc. dir. A >> P
Phase oversampling 0 %
FoV read 220 mm
FoV phase 100.0 %
Slice thickness 4.0 mm
TR 2000 ms
TE 25 ms
Averages 1
Concatenations 1
Filter None
Coil elements PH
Σ 00:00
Stop
Continue
Skip
13%
Program
Routine
Contrast
Resolution
Geometry
System
Physio
BOLD
Sequence
Waiting for slice positioning.
SAR=NM
9/17/2009 9:01:35 AM


Exam pause pop-up appears. Click “Continue” to begin scan. For subsequent scans follow the same procedure.
Exam
Viewing
Filming
3D
Open
Apply
Cancel
Region: Warmup
Exams: warmup
Programs: Warm_up001
1 localizer
2 epi2d_bold
3 epi2d_bold 00:34
Exam paused
3 epi2d_bold
Patient has contrast agent
Continue
Close
Skip
Help
Σ 00:34
Stop
Continue
Skip
1 localizer 00:09
2 epi2d_bold 04:52
3 epi2d_bold 04:52
Σ 09:53
Program
Waiting for user to continue.
Stimu=NM SAR=NM
9/17/2009 9:02:44 AM


Register... Num 0
Browser... Num .
Schedule...
Close Patient
Save As...
Copy Selection
Reset Table Position
Voice Output Properties...
Filming Layout...
Film Task Status...
Film Preview...
Expose Film Task Ctrl+P
Copy to Film Sheet
Search
Search Selected...
When study is complete, Click “Patient” and select “Close Patient” to end study.
Exam
Viewing
Filming
3D
test
4/4/1987
Scan
Apply
Cancel
1 localizer
2 epi2d_bold
3 epi2d_bold
Region: Warmup
Exams: warmup
Programs: Warm_up001
1 localizer 00:09
2 epi2d_bold 04:52
3 epi2d_bold 04:52
Σ 09:53
Σ 00:00
Stop
Continue
Skip
Program
13%
Waiting for scan instructions.
SAR=NM
9/17/2009 9:04:55 AM