



ASCEND CV® Reporting Quick Start Guide

Version 2.6

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About this Guide

This Guide introduces the ASCEND CV® reporting interface, including:

- The various user interfaces and controls (displays, forms, buttons).
- The steps in the reporting workflow (opening a study, marking it as ready to be read, recording findings, signing the final report).
- The management of data imported from Hospital Information Systems (HIS) and clinical devices (ultrasound scanners, physiologic devices).

In addition to reviewing this Guide, you should review your reporting module's *Quick Start Guide*

Echo Reporting Quick Start Guide

Vascular Reporting Quick Start Guide

Nuclear Reporting Quick Start Guide

Cath Reporting Quick Start Guide

EP Reporting Quick Start Guide

There are also video training libraries available on ASCEND HIT's ASCEND CV training web site covering the following reporting modules:

Cardiac Catheterization

CT Angiography

Echocardiography

Electrophysiology

Nuclear Cardiology

Vascular

These combined resources describe and demonstrate in detail how to use the clinical reporting interface to prepare a clinical report.

Finally, you should consult with your Lab Administrator regarding documentation for the following user interfaces:

- The worklist interface that you will use to select a study for reporting.
- The image review interface that you will use to review the images associated with a study.

Using ASCEND CV

ASCEND CV software is a valuable tool but is not a substitute for good clinical judgment. The physician signing a study assumes complete responsibility for ensuring the accuracy and completeness of a clinical report generated using the ASCEND CV software, including reviewing the report before signing it.

Opening a study for reporting

The **worklist interface** lists the studies available for reporting. Depending on your system configuration, the worklist interface may be provided by your Hospital Information System (HIS), by your Electronic Medical Record system (EMR), or by ASCEND CV.

The exact steps for opening a study will vary depending on the specific worklist interface. Consult with your Lab Administrator for documentation regarding your system's worklist interface. The ASCEND CV worklist interface is described in *Appendix A* of this Guide.

ASCEND CV Reporting Interface

Opening a study from the worklist displays the **ASCEND CV** reporting interface.

The screenshot shows the ASCEND CV Reporting Interface with several key components highlighted by orange arrows and labels:

- Study data toolbar**: Review and edit study data. This toolbar is located at the top left of the interface, below the main menu.
- Clinical reporting interface**: Review and edit clinical findings. This is the central area of the interface where clinical findings are reported and edited.
- Workflow toolbar**: Change study status. This toolbar is located at the top right of the interface, below the main menu.

The interface itself is divided into several sections:

- Top Menu**: Includes Data, Images, Participants, Study details, Workflow, and Print.
- Left Panel**: Contains a sidebar with tabs for History, Study, Measurements entry, and Measurements review. The main area displays findings for the left heart, including sections for Minor abnormalities, Left ventricle, Ventricular septum, Aortic valve, and Aorta.
- Right Panel**: Contains a sidebar with tabs for Findings and Report. The main area displays a summary of findings, including a list of findings, a summary of findings, and a list of findings.
- Status Bar**: Located at the bottom of the interface, it displays key information about the study, including Patient name (Carson, Mitchell), MRN (3162935), Module (Echocardiography), DOS (02/13/2013 09:01 AM), Status (In progress), and User (Abrahams, Tim, MD).

Status Bar

The **status bar** at the bottom of the ASCEND CV reporting interface lists key information about the study:

- **Patient**: Patient name and medical record number (MRN)
- **Study**: Reporting module (Echo, Vascular, Cath, etc.), date of service (DOS), and study status
- **User**: User name

Clinical Reporting Interface

The **clinical reporting interface** occupies the center of the ASCEND CV reporting interface. The tabs on the left side are used to enter data and the tabs on the right side are used to review the findings in the clinical report.

The data entry tabs, their contents, and the resulting reporting process will vary depending on the reporting module. The reporting module *Quick Start Guides* and *Video Training Library* describe how to use the clinical reporting interface to prepare clinical reports.

Study Data Toolbar

The **study data toolbar** is used to review and edit data related to the study.

Data **Images** **Participants** **Study details** **Workflow** **Print**

Data button

Clicking the **Data** button displays the status of data imported from the Hospital Information System (HIS) and clinical devices, including:

- **Pending:** Data awaiting import into the study
- **Previous:** Data that has been imported into the study.

In the example below, an order from the HIS and a set of measurements from an ultrasound machine (TomTec DICOM Echo) have been automatically imported.

Data import					
Pending					Refresh
Source info	Patient info	MRN	Account number	Action	Information
No data available in table					
Previous					
Source info	Patient info	MRN	Account number	Action	Information
06/19/2016 7:10:59 PM HIS	Carson, Mitchell 12/25/1947	3162935	10041889	Reimport	Import status: Automatically imported Contents: New order
06/19/2016 12:03:29 AM TomTec DICOM Echo	Carson, Mitchell 12/25/1947	3162935	10041889	Reimport	Import status: Imported by Long, Brian
					Close

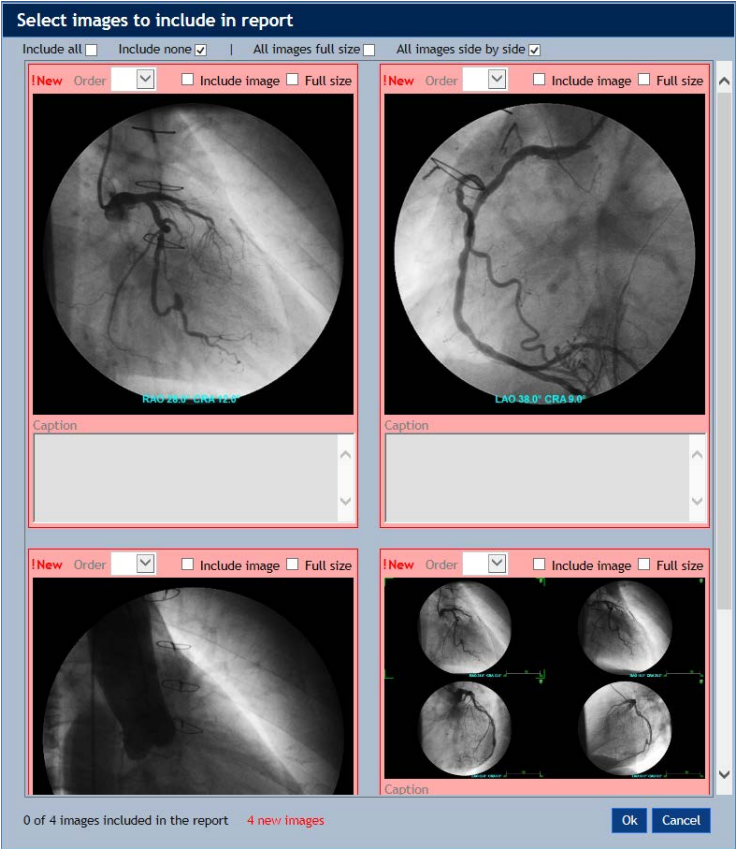
If the **Data** button is marked with a red exclamation mark **Data**, then the study has pending data that has not yet been imported. The example below shows a pending import from an ultrasound machine (TomTec DICOM Echo). You should review all pending imports and use the **Import** button to

import the data or the **Decline** button to decline import (if, for instance, the data was sent by mistake).

Data import					
Pending					Refresh
Source info	Patient info	MRN	Account number	Action	Information
06/19/2016 12:03:29 AM TomTec DICOM Echo	Carson, Mitchell 12/25/1947	3162935	10041889	Import Decline	
Previous					
Source info	Patient info	MRN	Account number	Action	Information
06/19/2016 7:10:59 PM HIS	Carson, Mitchell 12/25/1947	3162935	10041889	Reimport	Import status: Automatically imported Contents: New order
					Close

Images button

If there are new DICOM secondary capture images available for selective inclusion in the report the Images button will display a red exclamation mark **! Images**. Clicking the **Images** button displays the set of DICOM secondary-capture images associated with a study. The example below shows a set of secondary-capture images from a Cath study. Recently-added images are displayed within a red frame and include a **!New** marker to make them easy to locate.



You select the images you want to include on the report using the **Include all**, **Include none**, and **Include image** checkboxes.

Select images to include in report

☐ Include all
 ☐ Include none
 |
 ☐ All images full size
 ☒ All images side by side

!New Order 1

☒ Include image
 ☐ Full size

Caption

!New Order 2

☒ Include image
 ☐ Full size

Caption

!New Order 3

☒ Include image
 ☐ Full size

Caption

!New Order

☐ Include image
 ☐ Full size

Caption

3 of 4 images included in the report
 4 new images

Ok

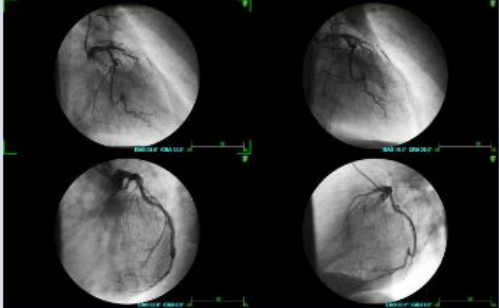
Cancel

By default, images will be displayed on the report in the order you select them. You can use the **Order** field to adjust the order. As you change the values in the Order field, the images will be rearranged to reflect your specified ordering.

Select images to include in report

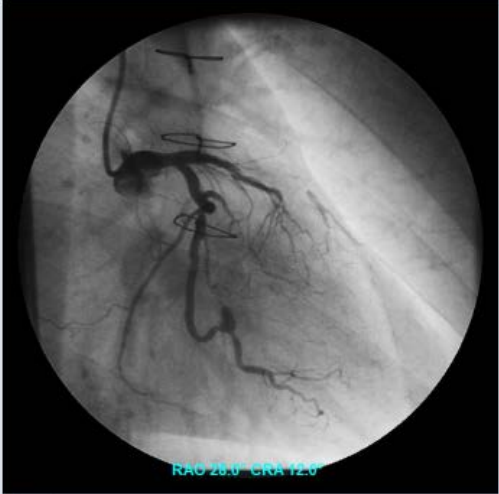
☐ Include all
 ☐ Include none
 |
 ☐ All images full size
 ☒ All images side by side

!New Order 1 ☐ Include image ☐ Full size



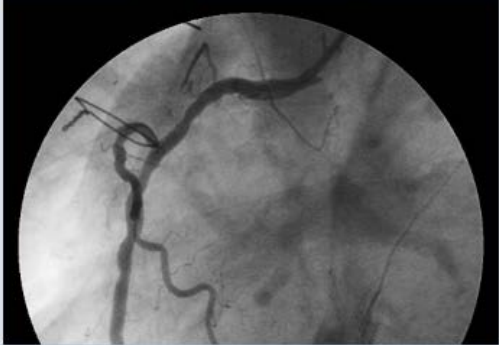
Caption

!New Order 2 ☐ Include image ☐ Full size

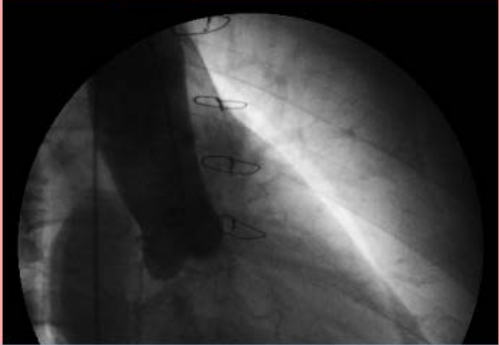


Caption

!New Order 3 ☐ Include image ☐ Full size



!New Order ☐ Include image ☐ Full size



3 of 4 images included in the report 4 new images

Ok Cancel

You can specify the image sizes using the **All images full size**, **All images side by side**, and **Full size** checkboxes and can add captions to the images using the **Caption** text boxes.

Select images to include in report

☐ Include all

☐ Include none

|

☐ All images full size

☐ All images side by side

!New

Order 1

☒ Include image

☒ Full size

Caption

IMAGE #1: Full-width quad view

!New

Order 2

☒ Include image

☐ Full size

!New

Order 3

☒ Include image

☐ Full size

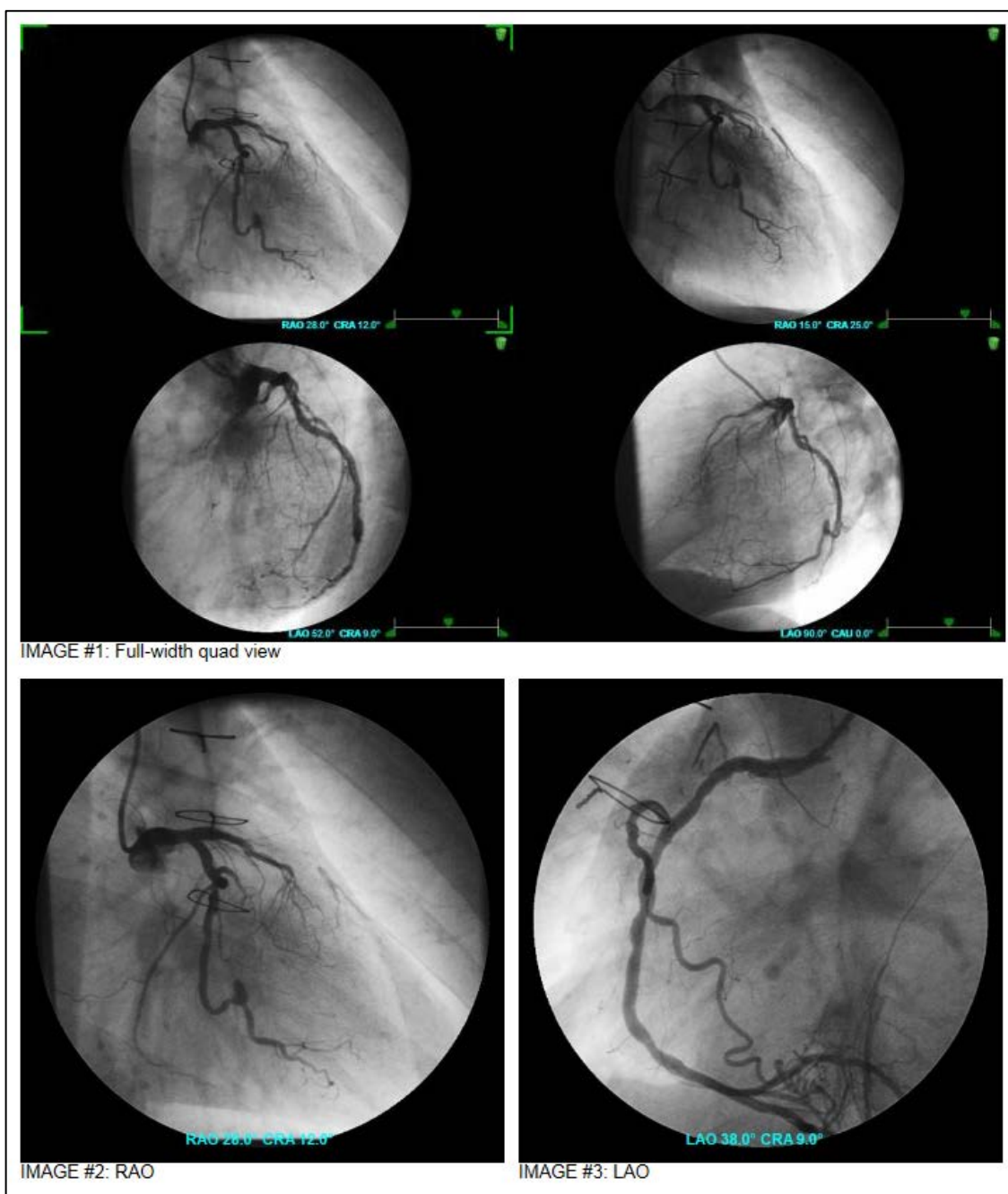
3 of 4 images included in the report

4 new images

Ok

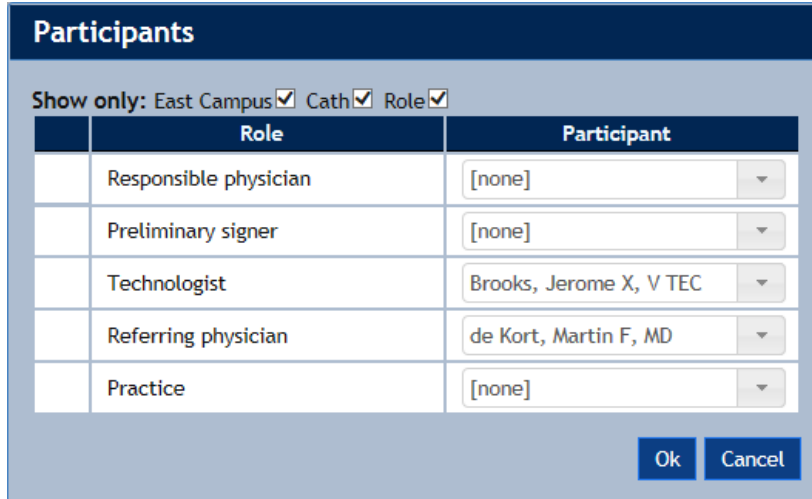
Cancel

The display of the images in the report matches their display in the **Images** panel.



Participants button

Clicking the **Participants** button displays the set of participant roles associated with the study, including physicians, technicians, and other staff, as well as the practice of the *Responsible physician* (the physician who will sign the report).

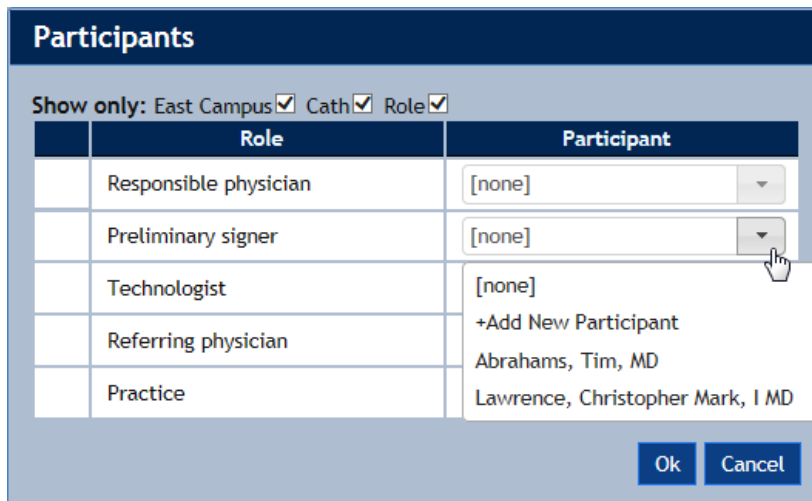


The screenshot shows a dialog box titled "Participants". At the top, there are checkboxes for "Show only: East Campus", "Cath", and "Role", all of which are checked. Below this is a table with two columns: "Role" and "Participant". The table lists five roles: Responsible physician, Preliminary signer, Technologist, Referring physician, and Practice. Each role has a corresponding participant list in a dropdown menu. The "Responsible physician" and "Preliminary signer" lists show "[none]". The "Technologist" list shows "Brooks, Jerome X, V TEC". The "Referring physician" list shows "de Kort, Martin F, MD". The "Practice" list shows "[none]". At the bottom right of the dialog box are "Ok" and "Cancel" buttons.

Role	Participant
Responsible physician	[none]
Preliminary signer	[none]
Technologist	Brooks, Jerome X, V TEC
Referring physician	de Kort, Martin F, MD
Practice	[none]

You can use each role's **Participant list** to

- Remove a participant by selecting **[none]** from the list.
- Add a new participant by selecting **+Add New Participant** from the list and entering the new participant's name, ID, address, email, phone number, etc. Note that the added participant will only be used in this study; the participant will not be displayed in the participant lists for other studies.
- Select one of participants in the list.



This screenshot is similar to the previous one, but the dropdown menu for the "Technologist" role is open. The menu shows the following options: "[none]", "+Add New Participant", "Abrahams, Tim, MD", and "Lawrence, Christopher Mark, I MD". A mouse cursor is pointing at the dropdown arrow. The "Ok" and "Cancel" buttons are still visible at the bottom right.

Role	Participant
Responsible physician	[none]
Preliminary signer	[none]
Technologist	[none] +Add New Participant Abrahams, Tim, MD Lawrence, Christopher Mark, I MD
Referring physician	
Practice	

You can filter the participant list by typing part of a name into the text box (e.g., "Law" in the example above). Selecting (checking) the **Facility**, **Reporting module**, and **Role** checkboxes will filter the participant list to include only those participants who are associated with the specified facility, reporting module, and role.

If the **Participant** button is marked with a red **!**, then there are required participants that have not been specified. The required participant roles are marked with a red **!** (Sonographer, in the example below). All required participants should be specified before a report is signed.

Participants

Show only: East Campus☒ Pediatric Echo☒ Role☒

	Role	Participant
	Responsible physician	[none]
	Preliminary signer	[none]
!	Sonographer	[none]
	Ordering physician	Abrahams, Tim, MD
	Practice	[none]

! These fields are required

Ok Cancel

Study details button

Clicking the **Study details** button displays detailed information regarding the study and the patient. The fields with white data entry boxes are editable. The remaining information is presented for review only.

Study details

Patient: Carson, Mitchell

Study Patient

Admission

Account number10041889
Arrival date/time02/13/2013 12:21 PM
AdmissionObservation

Order

Accession number12453
Study instance UID1.2.276.0.48.10002.9611523773214.20080305185623109347
Placer order number36099144
Order date/time02/13/2013 09:40 AM
Universal service IDTEE(CardiacEchoca20)
Urgency

Case

Lab discharge date/time
Location performed88
Procedure room2011

Study

Start date/time02/13/2013 09:01 AM
End date/time02/13/2013 09:40 AM

Ok Cancel

Study details

Patient: Carson, Mitchell

Study Patient

MPI

MRN 3162935 (MRN)

SSN 184-38-9676

DOB 12/25/1947

Birth gender Male

Race White

Ethnicity Unknown

Marital status Married

Death date/time

Email

Phone # (603)400-500

Business #

Address 603 THUNDER DR
PRESCOTT, AZ 863035088

OK Cancel

If the **Study details** button is marked with a red **!**, then there are required study details that have not been specified. The required fields are marked with a red **!** (study start date/time, in the example below). All required study detail fields should be specified before a report is signed.

Study details

Patient: Carson, Mitchell

! Study Patient

Admission

Account number 10041889

Arrival date/time 02/13/2013 12:21 PM

Admission Observation

Order

Accession number 12453

Study instance UID

Placer order number 36099144

Order date/time 02/13/2013 09:40 AM

Universal service ID TEE(CardiacEchoca20)

Urgency

Case

Lab discharge date/time

Location performed

Procedure room 2011

Study

! Start date/time

End date/time

! The field is required

OK Cancel

Workflow button

Clicking the **Workflow** button displays a list of events related to the study – including study creation, data imports, editing sessions, and study status changes.

Workflow events			
Date/time	User	Event	Details
06/19/2016 7:10 PM	System	Study status changed	To: Importing
06/19/2016 7:10 PM	System	External data imported to study	Source: HIS (6/19/2016 7:10:59 PM)
06/19/2016 7:11 PM	System	Study status changed	To: New
06/19/2016 7:11 PM	Long, Brian	Study status changed	To: In progress
06/19/2016 7:11 PM	Long, Brian	Study opened for edit	
06/19/2016 7:14 PM	Long, Brian	External data imported to study	Source: TomTec DICOM Echo (6/19/2016 12:03:29 AM)
Reset study			Close

In rare instances, you may need to use the **Reset study** button to return a study back to its initial state immediately after it was created in response to an order from the HIS. Note that resetting a study deletes all data imported from clinical devices, including images, and all recorded findings. When a study is reset all secondary capture images must be recaptured or retransmitted from the image viewer. You might reset a study, for instance, if an incomplete/incorrect data import was done or if a large number of incorrect findings were inadvertently recorded in a previous reporting session. Note that the clinical reporting interface's **Undo** button can be used to remove incorrect findings immediately after they are added.

Reset study confirmation

All recorded findings, imported device data, and imported secondary capture images will be deleted, but the original order will be retained. Device data will not be reimported automatically, but can be reimported manually. Secondary capture images will not be reimported automatically and must be recaptured. Following reset, the study will be closed and you will need to reopen it from the work list.

Do you wish to reset this case?

OKCancel


Print button

Clicking the **Print** button displays the reports associated with the study using the PDF viewer installed on your system (Adobe Reader® in the example below). Use the **Report selector** to choose the report to preview and click your PDF viewer's **Print** button to print the report.

Print preview

Report ▼

Patient: Carson, Mitchell MRN: 3162935 (MRN) Study date: 02/13/2013 09:01 East Campus



ASCEND General Hospital
1234 Main St. Anywhere, USA 02345
Phone: (800) 555-1234
Fax: (800) 555-1235

Transthoracic Echocardiography
M-mode, complete 2D, and complete spectral Doppler

Patient: Mitchell Carson	Study date: 02/13/2013	Height:
MRN: #3162935 (MRN)	Birth date: 12/25/1947	Weight:
Accession: #12453	Age: 65 yr	BSA:

Summary:

- Left ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is mildly reduced. The estimated ejection fraction is 55-65%. Wall motion is normal; there are no regional wall motion abnormalities.
- Ventricular septum: Thickness is mildly increased. Septal motion shows dyssynergy. The contour shows mild diastolic flattening.
- Pulmonary arteries: Systolic pressure is mildly increased.

History: Murmur. Atrial flutter. Primary pulmonary hypertension. Allergies: Aspirin allergy.

Study data: Study status: Elective. Procedure: Transthoracic echocardiography was performed. Image quality was excellent. Scanning was performed from the parasternal, apical, and subcostal acoustic windows. Images were captured in a quad screen format that simplified data comparison. Study completion: The patient tolerated the procedure well and was discharged from the lab. There were no complications.

Left ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is mildly reduced. The estimated ejection fraction is 55-65%. Wall motion is normal; there are no regional wall motion abnormalities. Wall motion score: 1.00.

Ventricular septum: Thickness is mildly increased. Septal motion shows dyssynergy. The contour shows mild diastolic flattening.

Aortic valve: The leaflets are normal thickness. Transvalvular velocity is within the normal range.

Aorta: A single aortic arch is present. Brachiocephalic branching is normal. The right innominate artery is the first aortic branch. The aorta is normal, not dilated, and non-diseased.

Mitral valve: The leaflets are moderately thickened.

Left atrium: The atrium is normal in size.

Right ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is normal.

Right atrium: The atrium is normal in size.

Tricuspid valve: The leaflets are mildly thickened.

Pulmonic valve: The leaflets are mildly calcified. There is a right sided raphe.

Pulmonary arteries: Systolic pressure is mildly increased.

Close

Workflow Toolbar

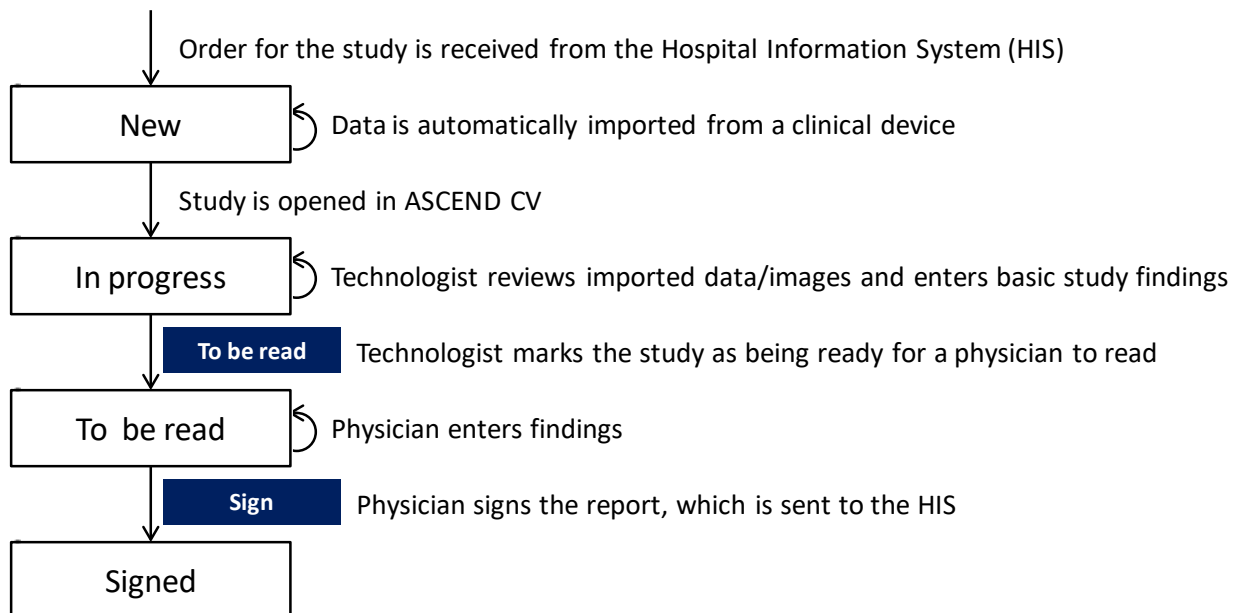
The **Workflow Toolbar** is used to move a study through the reporting workflow.

To be read **Sign** **Close**

ASCEND CV can be configured to support a variety of workflows. In the following sections, we will review several of the more common workflows. Consult with your Lab Administrator regarding the reporting workflows used at your facility.

Basic Reporting Workflow

The basic reporting workflow used in ASCEND CV is shown below. The boxes represent the statuses that a study passes through as the report is completed by the technologist and physician. The straight arrows represent actions that move the study from one status to the next. The loops indicate actions that change the study's data or findings, while keeping the study status unchanged.




Clicking the **To be read** button in the Workflow Toolbar moves the study from the status '*In progress*' to the status '*To be read*', indicating to reading physicians that the study is ready to be read.

Clicking the **Close** button closes the ASCEND CV reporting interface. Note that recorded data is automatically saved as it is recorded; no explicit *Save* action is required.

Clicking the **Sign** button displays the completed report and asks for confirmation of signing. Clicking the **Confirm** button completes the signing process, including moving the study from the status 'To be read' to the status 'Signed', sending the signed report to the HIS, and closing the ASCEND CV reporting interface.

Report signature confirmation



ASCEND General Hospital
1234 Main St. Anywhere, USA 02345
Phone: (800) 555-1234
Fax: (800) 555-1235

Transthoracic Echocardiography

M-mode, complete 2D, and complete spectral Doppler

Patient: Mitchell Carson	Study date: 02/13/2013	Height:
MRN: #3162935 (MRN)	Birth date: 12/25/1947	Weight:
Accession: #12453	Age: 65 yr	BSA:

Summary:

- Left ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is mildly reduced. The estimated ejection fraction is 55-65%. Wall motion is normal; there are no regional wall motion abnormalities.
- Ventricular septum: Thickness is mildly increased. Septal motion shows dyssynergy. The contour shows mild diastolic flattening.
- Pulmonary arteries: Systolic pressure is mildly increased.

History: Murmur. Atrial flutter. Primary pulmonary hypertension. Allergies: Aspirin allergy.

Study data: Study status: Elective. Procedure: Transthoracic echocardiography was performed. Image quality was excellent. Scanning was performed from the parasternal, apical, and subcostal acoustic windows. Images were captured in a quad screen format that simplified data comparison. Study completion: The patient tolerated the procedure well and was discharged from the lab. There were no complications.

Left ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is mildly reduced. The estimated ejection fraction is 55-65%. Wall motion is normal; there are no regional wall motion abnormalities. Wall motion score: 1.00.

Ventricular septum: Thickness is mildly increased. Septal motion shows dyssynergy. The contour shows mild diastolic flattening.

Aortic valve: The leaflets are normal thickness. Transvalvular velocity is within the normal range.

Aorta: A single aortic arch is present. Brachiocephalic branching is normal. The right innominate artery is the first aortic branch. The aorta is normal, not dilated, and non-diseased.

Mitral valve: The leaflets are moderately thickened.

Left atrium: The atrium is normal in size.

I have reviewed this report and assume responsibility for its accuracy and completeness.

Confirm

Cancel

The confirmation dialog will display warning notices above the report if the study has

- Pending (unprocessed) device data that has not been imported or declined. These are listed in the **Pending** table on the **Data** form
- Required participants that have not been specified. These are marked with a red ! on the **Participants** form.

- Required study details that have not been specified. These are marked with a red ! on the **Study details** form.
- Required clinical findings that have not been recorded. These are marked with a red ! in the findings/report viewer.
- Pending (unprocessed) secondary-capture images that have not been selected or declined. These are listed on the **Image** form.

In addition, a precautionary notice will be displayed if the physician signing the study is different from the *Responsible physician* assigned to the study or is not a member of the practice assigned to the study.

Your system can be configured by your Lab administrator to

- Only display the confirmation dialog when such issues exist (in the absence of such issues, the report will be signed without confirmation).
- Require you to resolve some or all such issues before confirming signing of a study.
- Never display the confirmation dialog.

Report signature confirmation

Notifications:
You are signing a study that has been assigned to Abrahams, Tim, MD as the responsible physician

Participants: The following are required:
Technologist

Images: The following are required:
There are images that have not been reviewed



ASCEND General Hospital
1234 Main St. Anywhere, USA 02345
Phone: (800) 555-1234
Fax: (800) 555-1235

Catheterization Laboratory Study

Patient: Herz M. Liebliches	Study date: 11/21/2011	Height:
MRN: #1234567 (MRN)	Birth date: 09/19/1953	Weight:
Accession: #1110287968	Age: 58 yr	BSA:

History: PMH: Myocardial infarction. Chronic lung disease. Functional status: Dialysis-dependent renal failure; prior history of congestive heart failure. Risk factors: Current tobacco use. Hypertension. Diabetes mellitus; on therapy with diet. Dyslipidemia. Allergies: No known allergies.

Labs, prior tests, procedures, and surgery:
Hemoglobin (recent) of 9 g/dl. Platelet count (recent) of 304 th/ul. International normalized ratio (INR) (recent) of 1.03. Serum creatinine (recent) of 1.56 mg/dl. Blood urea nitrogen (recent) of 46 mg/dl. Serum potassium (K) (recent) of 4.7 mEq/l. Catheterization with coronary intervention (11/19/2012).

Study data: Study status: Cardiac cath: elective. Consent: The risks, benefits, and alternatives to the procedure were explained to the patient and informed consent was obtained.

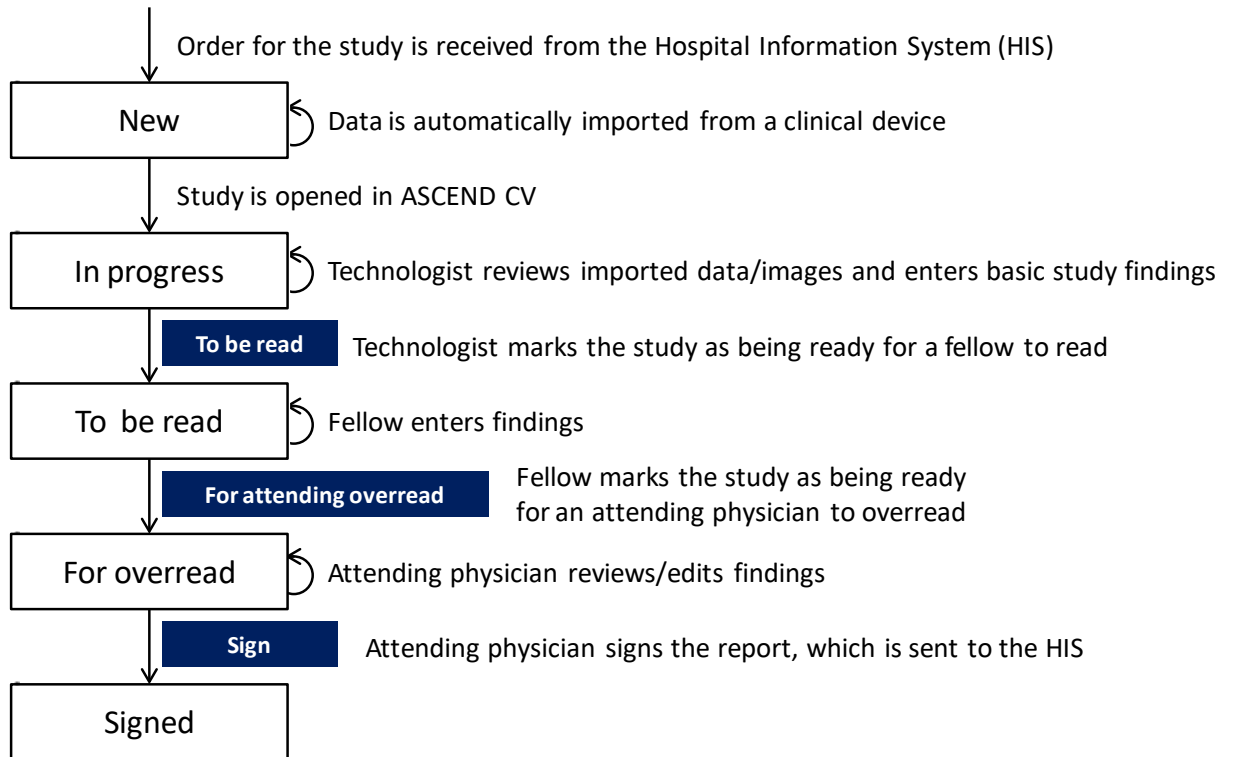
Procedures performed: Right heart catheterization. Retrograde left heart catheterization with ventriculography. Left coronary angiography. Right coronary angiography. Right femoral sheath side-port angiography.

I have reviewed this report and assume responsibility for its accuracy and completeness.

Confirm Cancel

Overread Workflow

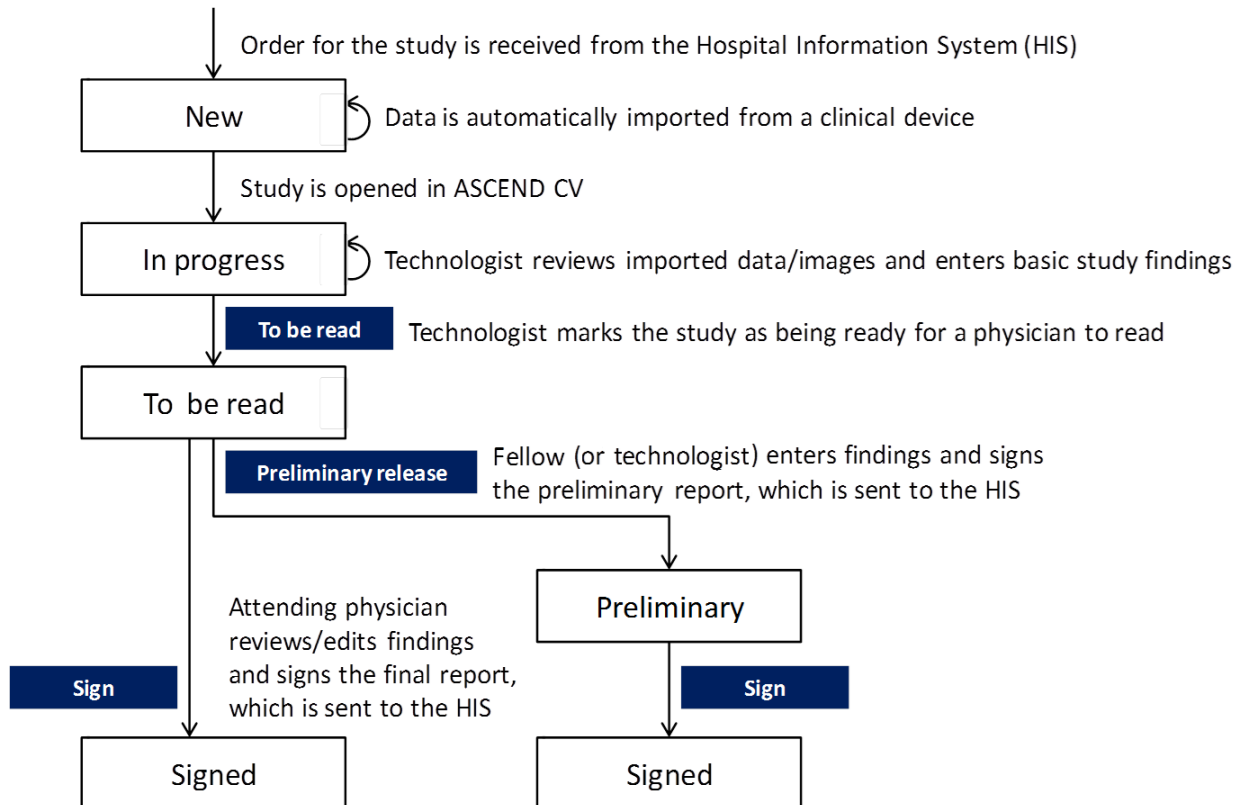
ASCEND CV can be configured to support a workflow that includes Cardiology fellows. In this workflow, a fellow creates an initial report and clicks the **For attending overread** button to move the study from the status *To be read* to the status *For overread*. An attending physician reviews/edits the report and signs it.



Preliminary Report Workflow

ASCEND CV can be configured to support a workflow that supports preliminary reports. In this workflow, a fellow (or technologist) can create a preliminary report by clicking the **Preliminary release** button to sign the preliminary report and send it to the HIS, thereby moving the study from the status *'To be read'* to the status *'Preliminary'* (the right branch in the figure below). An attending physician then reviews/edits the report and signs it.

If a preliminary report was not created, the study remains in the status *'To be read'* and the attending physician edits the findings and signs the report (the left branch in the figure below).



It is possible for an ASCEND CV system administrator to customize the preliminary banner and also add optional additional text at the very top of a preliminary report, if the default banner is not sufficient. Also, custom mini-banner text can be configured for just above the preliminary report signature line.

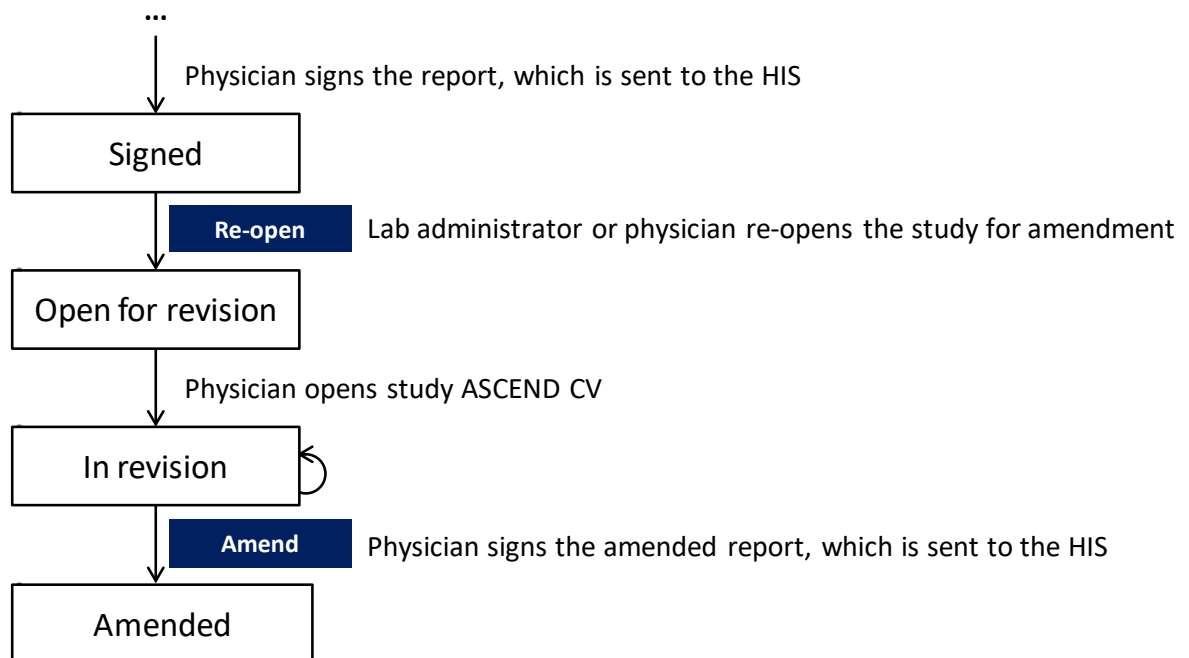
Amendment Workflow

ASCEND CV allows for the amendment of a signed report, where the amendment process can be configured to include any or all of the following:

- Whether or not the amending user must enter a reason for amending the report, purely for noting in the audit log and not shown on the amended report. By default is required.
- Adding a block of text as an addendum to the report. ASCEND CV can be configured to require an addendum on every amended report. In addition, the position of the addendum within the report itself can be configured. By default is required.
- Modifying a report by adding missing findings and/or deleting incorrect findings. ASCEND CV can be configured to either permit or prevent the modification of report findings during the amendment process. By default is permitted.

The physician that signed a report is always allowed to open that same report for amendment. The ability to initiate the amendment of any type of report at one or more facilities is also granted to lab administrators.

Note that ASCEND CV retains copies of all signed reports (preliminary, signed, and amended).



When a signed study is opened, ASCEND CV displays the signed report.

ASCEND Re-open Close

Report - Signed - Saved on 11/08/2015 00:04 Print

ASCEND General Hospital
 1234 Main St. Anywhere, USA 02345
 Phone: (800) 555-1234
 Fax: (800) 555-1235

**Transthoracic Echocardiography
Limited 2D**

Patient: Mitchell Carson	Ordering physician: Michael Edwards, MD
MR Number: TB0001	Referring physician: Mary Martin, MD
Age: 58 yr	Height: ,
Birth Date: December 25, 1947	Weight: ,
Study Date: November 20, 2011	Archive ID: CTH-12345

Summary:

- Right atrium: The atrium is dilated.
- Left atrium: The atrium is dilated.
- Tricuspid valve: There is moderate-severe regurgitation.
- Mitral valve: There is moderate to severe regurgitation.
- Left ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is reduced. The estimated ejection fraction is 40-45%, by visual assessment.
- Pulmonary arteries: Systolic pressure is moderately increased, ≥ 50 mm Hg.
- Pericardium, extracardiac: A possible, trivial pericardial effusion is identified posterior to the heart. There is a moderate-sized left pleural effusion.

Study data: Study status: Elective. Procedure: Transthoracic echocardiography was performed. Image quality was fair. Scanning was performed from the parasternal, apical, and subcostal acoustic windows. Images were captured in a quad screen format that simplified data comparison. Study completion: The patient tolerated the procedure well and was discharged from the lab. There were no complications.

Left ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is reduced. The estimated ejection fraction is 40-45%, by visual assessment.

Aortic valve: The valve is structurally normal. The valve is trileaflet. Cusp separation is normal.

Aorta: Aortic root: The aortic root is not dilated.

Mitral valve: The leaflets are mildly thickened. Leaflet separation is normal. *Doppler:* Transvalvular velocity is within the normal range. There is no evidence for stenosis. There is moderate to severe regurgitation.

Left atrium: The atrium is dilated.

Right ventricle: The cavity size is normal. Wall thickness is normal.

Right atrium: The atrium is dilated.

Tricuspid valve: The valve is structurally normal. Leaflet separation is normal. *Doppler:* Transvalvular velocity is within the normal range. There is no evidence for stenosis. There is moderate-severe regurgitation.

Pulmonary artery: The main pulmonary artery is normal-sized. Systolic pressure is moderately increased, \geq

Patient: Carson, Mitchell MRN: 3162935 (MRN) Module: Echocardiography DOS: 01/24/2013 07:39 AM; Status: Signed User: Abrahams, Tim, MD

Clicking the **Re-open** button initiates the amendment process, requesting the reason that the study is being re-opened for amendment. Note that a reason must be provided and listed in the audit log, but is not displayed on the report.

Re-open for amendment

Reason for amendment -- This information is not shown on the amended report

Failed to classify aortic regurgitation.

Close Close this window and leave the study for physician to amend

Addendum -- This information is shown on the amended report

Addendum text is required

Sign Sign study without editing findings

Edit report Open the study for editing

Cancel

If ASCEND CV has been configured to permit editing of report findings during the amendment process, then an **Edit report** button will be displayed at the bottom of the “Re-Open for amendment” dialog (as shown above).

The Amendment dialog can also be closed, leaving the report in a state where another physician can amend it; but more often the same user that has re-opened the report for amendment will do one of the following:

- Add addendum text and re-sign the report as amended
- or further edit the report body with or without addendum text (if so configured)

Re-open for amendment

Reason for amendment -- This information is not shown on the amended report

Failed to classify aortic regurgitation.

Close

Close this window and leave the study for physician to amend

Addendum -- This information is shown on the amended report

This addendum text is optional but must be entered to sign the study without editing the report.

Sign

Sign study without editing findings

Edit report

Open the study for editing

Cancel

Clicking the **Edit report** button changes the study status to ‘Open for revision’ and opens the report for further editing. Buttons in the top-right allow the physician to sign the amended report, cancel the amendment process, or close the report in-progress allowing the editing and amendment to be completed later:

The screenshot displays the ASCEND software interface for echocardiography reporting. The top navigation bar includes tabs for Data, Images, Participants, Study details, Workflow, and Print. A search bar and utility buttons (UNDO, REDO, HELP, OPTIONS) are also present. The main content area is divided into two panels: 'Findings - left heart' on the left and a 'Summary' on the right. The 'Findings' panel lists various cardiac structures with their respective measurements and status (e.g., Normal, Mildly reduced, Present). The 'Summary' panel provides a concise overview of the findings, including a list of abnormalities and a brief clinical impression. The bottom status bar shows patient information (Carson, Mitchell), study details (Echocardiography), and user information (Abrahams, Tim, MD).

Findings - left heart

Minor abnormalities

Left ventricle

Normal by TTE

Cavity size: Normal

Thickness: Normal

Diffuse hypokinesis: Mild

Systolic function worksheet

Systolic function: Mildly reduced

EF (%): 55-65

Normal, no regional abnormality: ☒

Regional wall motion worksheet

Diastolic function: Normal

Ventricular septum

Normal

Thickness: Mildly increased

Dyssynergy: Present

Diastolic flattening: Mild

Systolic flattening: Present

Aortic valve

Normal by TTE

Visualization: Well visualized

Leaflet number: Trileaflet

Appearance: Normal thickness

Velocity: Normal

Stenosis: Absent

Regurgitation: Moderate

Aorta

Normal

Visualization: Well visualized

Dilation: Absent

Calcification: Mild

Coronary arteries

Mitral valve

Normal by TTE

Visualization: Well visualized

Annulus: ☒

Leaflets: Moderately thickened

Bowing, prolapse: Absent

Velocity: Normal

Stenosis: Absent

Regurgitation: No significant

Left atrium

Normal by TTE

Visualization: Well visualized

Size: Normal

Pulmonary veins

Individual veins

Summary

- Left ventricle:** The cavity size is normal. Wall thickness is normal. ☒ Systolic function is mildly reduced. The estimated ejection fraction is 55-65%. ☒ Wall motion is normal; there are no regional wall motion abnormalities. ☒
- Ventricular septum:** Thickness is mildly increased. ☒ Septal motion shows dyssynergy. ☒ The contour shows mild diastolic flattening. ☒
- Aortic valve:** There is moderate regurgitation. ☒
- Pulmonary arteries:** Systolic pressure is mildly increased. ☒
- New summary item**

Impressions

- No evidence of myocardial trauma. ☒
- Mild subvalvular aortic stenosis, with congestive heart failure. ☒
- New impression**

HPI and indications

Murmur. ☒ Atrial flutter. ☒ Primary pulmonary hypertension. ☒

Allergies, diet, and meds

Aspirin allergy. ☒

Study data

Patient is 65 yr old. ☒ Patient birthdate: 12/25/1947. ☒ Study date: 02/13/2013. ☒ Study time: 09:01 AM. ☒ Race: white. ☒ Ethnicity: Unknown. ☒ Gender: male. ☒ Transthoracic echocardiography. ☒ M-mode, complete 2D, and complete spectral Doppler. ☒ Outpatient. ☒ Elective. ☒ The patient tolerated the procedure well and was discharged from the lab. ☒

Procedure narrative


Transthoracic echocardiography was performed. Image quality was excellent. Scanning was performed from the parasternal, apical, and

Patient: Carson, Mitchell MRN: 3162935 (MRN) Module: Echocardiography DOS: 02/13/2013 09:01 AM; Status: In revision User: Abrahams, Tim, MD

Note that when a study is re-opened to allow editing of report findings, the patient and order information will automatically be updated to reflect any changes sent by the Hospital Information System (if the patient’s address has changed since the original report was signed, for instance). Confirm that the patient and order information is accurate for the study being amended and manually edit this information, if necessary.

Clicking the **Sign** button on either the **Amend report** form or the ASCEND CV reporting interface displays the amended report (note the inclusion of an addendum below) and may ask for confirmation of signing. Clicking the **Confirm** button completes the amendment process, moving the study to the status 'Amended' and sending the amended report to the HIS.

Report signature confirmation



ASCEND General Hospital
1234 Main St. Anywhere, USA 02345
Phone: (800) 555-1234
Fax: (800) 555-1235

Transthoracic Echocardiography

M-mode, complete 2D, and complete spectral Doppler

Patient: Mitchell Carson	Study date: 02/13/2013	Height:
MRN: #3162935 (MRN)	Birth date: 12/25/1947	Weight:
Accession: #12453	Age: 65 yr	BSA:

Addendum: This addendum text is optional but must be entered to sign the study without editing the report.

Impressions:

- No evidence of myocardial trauma.
- Mild subvalvar aortic stenosis, with congestive heart failure.

Summary:

- Left ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is mildly reduced. The estimated ejection fraction is 55-65%. Wall motion is normal; there are no regional wall motion abnormalities.
- Ventricular septum: Thickness is mildly increased. Septal motion shows dyssynergy. The contour shows mild diastolic flattening.
- Aortic valve: There is moderate regurgitation.
- Pulmonary arteries: Systolic pressure is mildly increased.

History: Murmur. Atrial flutter. Primary pulmonary hypertension. Allergies: Aspirin allergy.

Study data: Study status: Elective. Procedure: Transthoracic echocardiography was performed. Image quality was excellent. Scanning was performed from the parasternal, apical, and subcostal acoustic windows. Images were captured in a quad screen format that simplified data comparison. Study completion: The patient tolerated the procedure well and was discharged from the lab. There were no complications.

Left ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is mildly reduced. The

I have reviewed this report and assume responsibility for its accuracy and completeness.

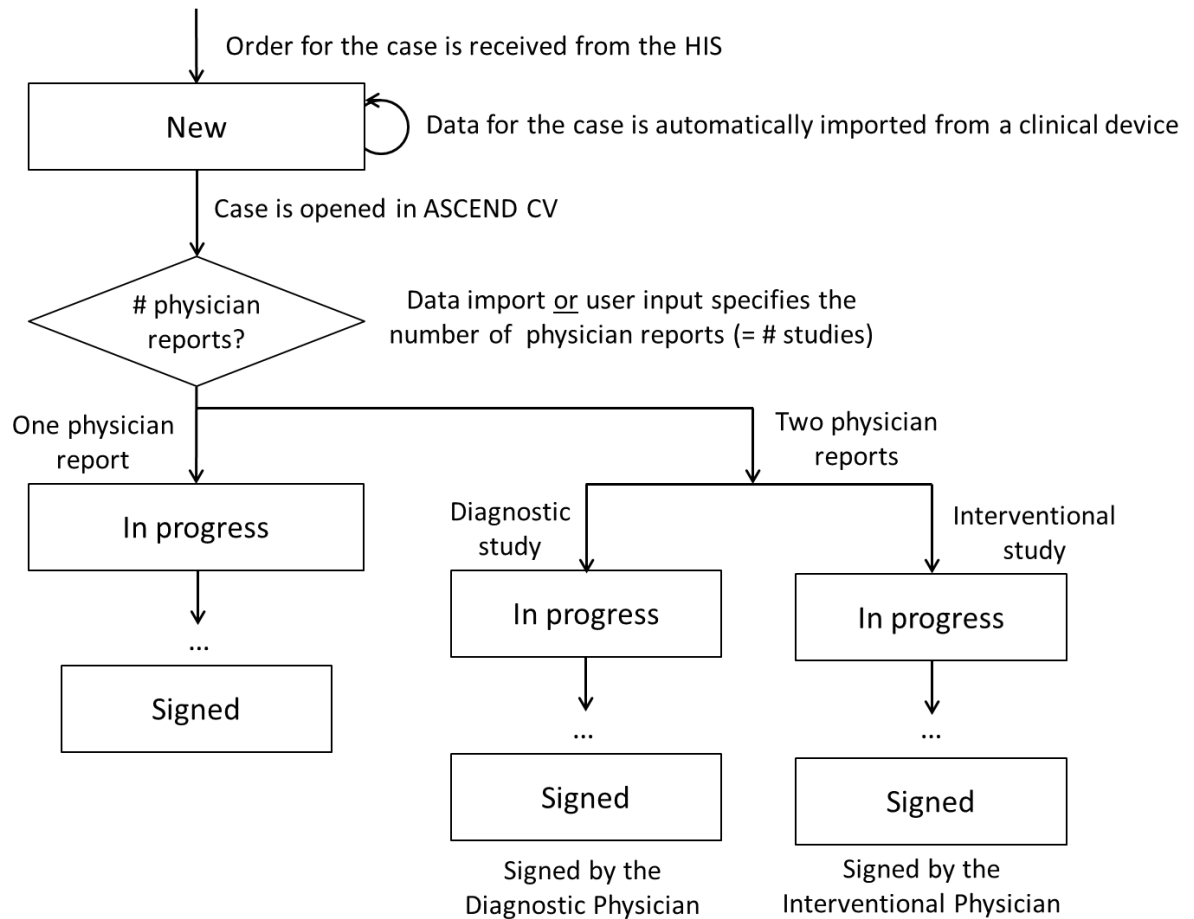
Edit addendum

Confirm

Cancel

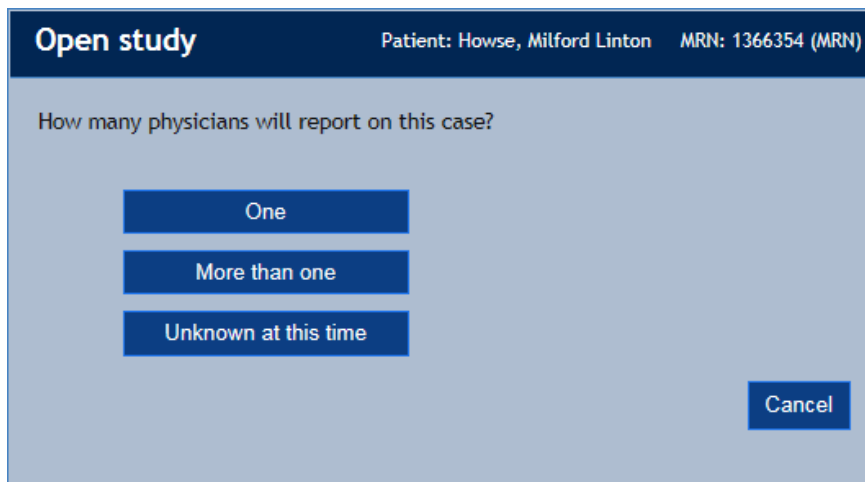
“Split case” Workflow

ASCEND CV can be configured to allow multiple physicians to report separately on a case. For example, a Cath case might consist of a diagnostic study performed by one physician followed by an interventional study performed by a different physician, where both studies share the same order (same accession number) and are recorded as a single case by the Cath lab’s physiologic monitoring system; but where each physician creates a report for their study.



Specifying the number of physician reports for a case

Usually, the number of physician reports for a case is recorded by a clinical device and passed to ASCEND CV prior to the case being opened for reporting in ASCEND CV. If the number of physician reports has not yet been specified when a case is opened in ASCEND CV, the user will be asked to specify this number.



Open study Patient: Howse, Milford Linton MRN: 1366354 (MRN)

How many physicians will report on this case?

One

More than one

Unknown at this time

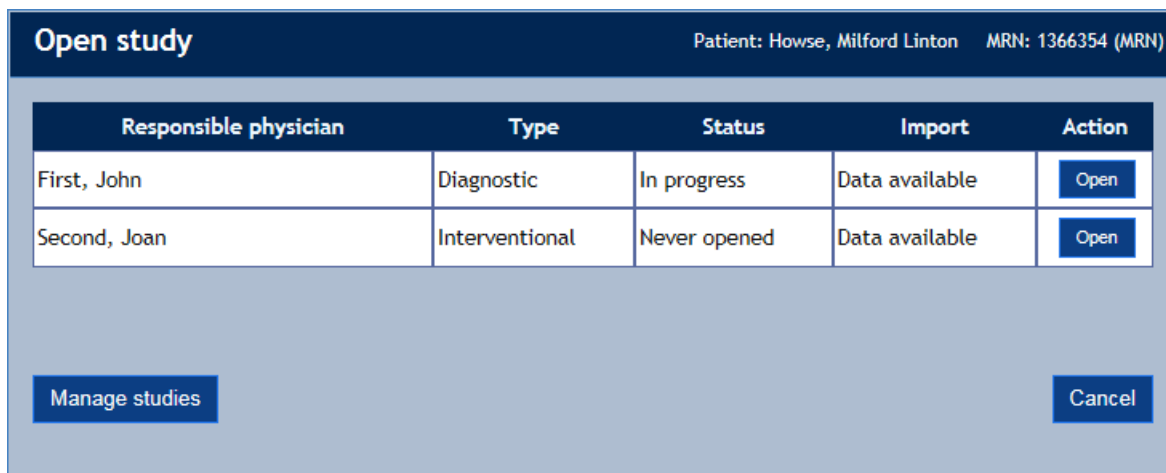
Cancel

- Selecting “One” specifies that the case will have one physician report – or equivalently, one *Responsible physician*.
- Selecting “More than one” will “split” the case into two separate studies – each with its own report and *Responsible physician*.
- Selecting “Unknown” defers answering of this question until the next time a user opens the case in ASCEND CV. In the interim, reporting on the case will proceed as if there will be only one physician report.

Note that the number of physician reports must be specified before any reports for the case can be signed.

Opening a study in a multi-study case

If a case has multiple studies, ASCEND CV will display the following form:



Open study Patient: Howse, Milford Linton MRN: 1366354 (MRN)

Responsible physician	Type	Status	Import	Action
First, John	Diagnostic	In progress	Data available	Open
Second, Joan	Interventional	Never opened	Data available	Open

Manage studies Cancel

- Selecting an **Open** button opens the associated study for reporting.
- Selecting the **Manage studies** button displays a form for editing a study's *Responsible physician* or *Study type* or for deleting a study.

Manage studies
Patient: Howse, Milford Linton MRN: 1366354 (MRN)

Responsible physician	Type	Status	Action
First, John	Diagnostic	In progress	<div>Edit</div> <div>Delete</div>
Second, Joan	Interventional	Never opened	<div>Edit</div> <div>Delete</div>

Close

Note that this same form can be displayed during reporting by selecting the **Manage studies** button displayed on the **Study data toolbar**.

Completing a report

Each study proceeds separately through its own reporting workflow – including

- Data import; the data imported from clinical devices will be divided between the two studies as appropriate
- Data entry and review
- Signing

Force closing another user's reporting session

If you view a study that is already open for editing by another user you will be presented with a report preview screen. From this screen you can select the most recently saved version of the study, or any previously confirmed or signed version for review.

ASCEND TEST SYSTEM, NOT FOR CLINICAL USE

Report - Current unsigned - Saved on 02/13/2016 13:35

Print

ASCEND General Hospital
1234 Main St. Anywhere, USA 02345
Phone: (800) 555-1234
Fax: (800) 555-1235

Myocardial Perfusion Imaging
Bruce protocol
Gated SPECT and planar imaging

Patient: Phill Radke
MRN: #433627 (MRN)
Accession: #999999

Study date: 02/15/2013
Birth date: 06/29/1940
Age: 72 yr

Height:
Weight:
BSA:

Impressions: Normal study after maximal exercise.

Summary:
1. **Stress ECG conclusions:** There are no stress arrhythmias or conduction abnormalities. The stress ECG is normal. Duke scoring: exercise time of 7.92 min; maximum ST deviation of 6.8 mm; .

History: **Allergies:** No known allergies.

Study data: **Study status:** Elective. **Consent:** The risks, benefits, and alternatives to the procedure were explained to the patient and informed consent was obtained. **Procedure:** Initial setup. The patient was brought to the laboratory. A baseline ECG was recorded. Intravenous access was obtained. Surface ECG leads and manual cuff blood pressure measurements were monitored. Treadmill exercise testing was performed using the Bruce protocol. The patient exercised for 7 min 55 sec, to a maximal work rate of 9.1 mets. Exercise was terminated due to fatigue and dizziness. **Study completion:** All catheters inserted during the procedure were removed. The patient tolerated the procedure well and was discharged from the lab.

Baseline ECG: Normal.

Stress protocol:

Stage	HR	BP (mmHg)
SUPINE	60	120/80 (93)
STANDING	60	120/80 (93)
START EXE	60	120/80 (93)
STAGE 2	80	126/79 (95)
STAGE 3	120	148/95 (113)
PEAK EXE	180	154/104 (121)
END REC	60	137/86 (103)

Stress results: Maximal heart rate during stress was 180 bpm (122% of maximal predicted heart rate). The maximal predicted heart rate was 148 bpm. The target heart rate was achieved. The heart rate response to stress is normal. The rate-pressure product for the peak heart rate and blood pressure was 27720 mm Hg/min. The patient experienced no chest pain during stress. Functional capacity is normal.

Patient: Radke, Phill MRN: 433627 (MRN) Module: Nuclear cardiology DOS: 02/15/2013 01:45 AM; Status: In progress User: Lawrence, Christopher Mark, I MD

If your ASCEND CV lab administrator has configured the application to allow reporting users to force close other studies, you will also be presented with an **Edit** button near the top right. If you click on **Edit** a notification will be displayed that the study is currently locked (open for edit) by another user:

The study is currently locked by Tech, C V. Please try again later. **Unlock** **Edit** **Close**

If you click **Unlock** you will be presented with a confirmation dialog:

Unlock study

Lock held by user: C V. Tech
Idle time: 5 minute(s)

This will force the user out of the study. The user's last editing action may be lost. Do you want to continue?

OK **Cancel**

If you then click **OK** you will have unlocked the study for editing by another user, including yourself. If you now click on the **Edit** button you will succeed in opening the study for edit.

Appendix A – ASCEND CV Worklist

Depending on your system configuration, your worklist interface may be provided by your Hospital Information System (HIS), by your Electronic Medical Record system (EMR), or by ASCEND CV. This Appendix describes the ASCEND CV worklist interface.

The **ASCEND CV worklist** displays the list of studies available for reporting or review.

ASCEND

Abrahams, Tim, MD

Log out

Open studies

Manage view

Open study

View

Assign

Manage studies


New study

Administer

Refresh

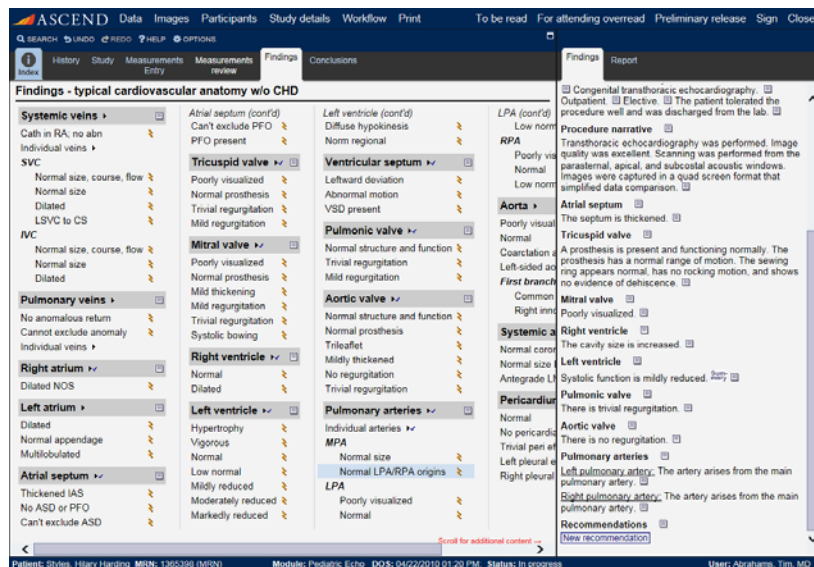
Facility	Study status	Accession number	MRN	Patient name	Birth date	Reporting module	Responsible physician	US
East Campus	In progress	246epd249	1366354 (MRN)	Howse, Milford Linton	03/29/1932	Cath implant	Hancock, John, MD	Ca
East Campus	New	246epd249	1366354 (MRN)	Howse, Milford Linton	03/29/1932	Cath implant		Ca
East Campus	In progress	1110287968	1234567 (MRN)	Liebliches, Herz M	09/19/1953	Cath	Abrahams, Tim, MD	LH
East Campus	New	1110287968	1234567 (MRN)	Liebliches, Herz M	09/19/1953	Cath		LH
East Campus	New	698aod964	648379 (MRN)	Lowell, Ralph Julius	01/27/1943	Echocardiography		Ecd
East Campus	New	469eds159	1365396 (MRN)	Norris, Steve Avery	06/25/1949	Electrophysiology		EP
East Campus	New	989898	433627 (MRN)	Radke, Phill	06/29/1940	Nuclear cardiology		Nu
East Campus	New	569kdi912	1365397 (MRN)	Rains, Mya Shawna	09/25/1952	CT angiography		CT
East Campus	In progress	466kdi1157	1365398 (MRN)	Chase, Hilary Harding	08/05/2002	Pediatric Echo		Pe

Refreshing the worklist

Clicking the  **Refresh** button refreshes the worklist to display newly-arrived orders or newly-assigned studies, for example.

Opening a study for reporting

Selecting a study from the worklist and clicking the **Open study** button opens the study in the ASCEND CV reporting interface. Once you have completed reporting, clicking the appropriate **Sign** or **Close** button on the workflow toolbar returns you back to the worklist.



Previewing a report

Selecting a study from the worklist and clicking the **View** button displays the report associated with the selected study.

The screenshot shows the ASCEND report viewer interface. At the top, it says "Report - Signed - Saved on 11/08/2015 00:04". The report is for "ASCEND General Hospital" and "Transthoracic Echocardiography Limited 2D". The patient is Mitchell Carson, MRN: TB0001, 58 years old, born December 25, 1947. The study date is November 20, 2011. The ordering physician is Michael Edwards, MD, and the referring physician is Mary Martin, MD. The archive ID is CTH-12345.

Summary:

1. Right atrium: The atrium is dilated.
2. Left atrium: The atrium is dilated.
3. Tricuspid valve: There is moderate-severe regurgitation.
4. Mitral valve: There is moderate to severe regurgitation.
5. Left ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is reduced. The estimated ejection fraction is 40-45%, by visual assessment.
6. Pulmonary arteries: Systolic pressure is moderately increased, ≥ 50 mm Hg.
7. Pericardium, extracardiac: A possible, trivial pericardial effusion is identified posterior to the heart. There is a moderate-sized left pleural effusion.

Study data: Study status: Elective. Procedure: Transthoracic echocardiography was performed. Image quality was fair. Scanning was performed from the parasternal, apical, and subcostal acoustic windows. Images were captured in a quad screen format that simplified data comparison. Study completion: The patient tolerated the procedure well and was discharged from the lab. There were no complications.

Left ventricle: The cavity size is normal. Wall thickness is normal. Systolic function is reduced. The estimated ejection fraction is 40-45%, by visual assessment.

Aortic valve: The valve is structurally normal. The valve is trileaflet. Cusp separation is normal.

Aorta: Aortic root: The aortic root is not dilated.

Mitral valve: The leaflets are mildly thickened. Leaflet separation is normal. Doppler: Transvalvular velocity is within the normal range. There is no evidence for stenosis. There is moderate to severe regurgitation.

Left atrium: The atrium is dilated.

Right ventricle: The cavity size is normal. Wall thickness is normal.

Right atrium: The atrium is dilated.

Tricuspid valve: The valve is structurally normal. Leaflet separation is normal. Doppler: Transvalvular velocity is within the normal range. There is no evidence for stenosis. There is moderate-severe regurgitation.

Pulmonary artery: The main pulmonary artery is normal-sized. Systolic pressure is moderately increased, \geq

At the bottom, it says "Patient: Carson, Mitchell MRN: 3162935 (MRN) Module: Echocardiography DOS: 01/24/2013 07:39 AM; Status: Signed User: Abrahams, Tim, MD".

If ASCEND CV has reports for prior Cardiology studies for the patient associated with the selected study, then a **Show comparison studies** button will be displayed top-left that when pressed displays these prior reports (left) alongside the report for the selected study (right).

The screenshot shows the ASCEND report viewer interface with two reports displayed side-by-side. The left report is "Myocardial Perfusion Imaging Bruce protocol Gated SPECT and planar imaging" for Phillip Radke, MRN: 433627, 63 years old, born 06/29/1940. The study date is 03/09/2004. The summary states: "Stress ECG conclusions: Duke scoring: exercise time of 6.25 min; maximum ST deviation of 1.1 mm; no angina; resulting score is 1. This score predicts a moderate risk of cardiac events." The impressions state: "Abnormal study after maximal exercise without reproduction of symptoms. Cannot exclude myocardial infarction, in the territory of the left circumflex coronary artery." The recommendations state: "1. If patient symptoms persist 2. Cardiac catheterization should be performed." The history states: "Moderate exertional chest pain. Risk factors: Current tobacco use. Hypertension. Diabetes mellitus. Dyslipidemia." The study data states: "Study status: Elective. Consent. The risks, benefits, and alternatives to the procedure were explained to the patient and informed consent was obtained. Procedure: Initial setup. The patient was brought to the laboratory. A baseline ECG was recorded. Intravenous access was obtained. Surface ECG leads and manual cuff blood pressure measurements were monitored. Treadmill exercise testing was performed using the Bruce protocol. The patient exercised for 6 min 15 sec, to a maximal work rate of 7.4 mets. Exercise was terminated due to fatigue. Study completion: All catheters inserted during the procedure were removed. The patient tolerated the procedure well and was discharged from the lab." The stress protocol table shows: STANDING 85 173/101 (125), START EXE 94 160/110 (141).

The right report is "Bruce protocol" for Phillip Radke, MRN: #433627 (MRN), Accession: #989898. The study date is 02/15/2013, birth date is 06/29/1940, height is 72 yr, weight is 180 lbs, and BSA is 2.22 m². The summary states: "1. Stress ECG conclusions: Duke scoring: exercise time of 7.92 min; maximum ST deviation of 6.8 mm; -". The history states: "Allergies: No known allergies." The study data states: "Study status: Elective. Procedure: Treadmill exercise testing was performed using the Bruce protocol. The patient exercised for 7 min 55 sec, to a maximal work rate of 9.1 mets. Exercise was terminated due to fatigue and dizziness." The stress protocol table shows: SUPINE 60 120/80 (93), STANDING 60 120/80 (93), START EXE 60 120/80 (93), STAGE 2 80 126/79 (95), STAGE 3 120 148/95 (113), PEAK EXE 180 154/104 (121), END REC 60 137/86 (103). The stress results state: "Maximal heart rate during stress was 160 bpm (122% of maximal predicted heart rate). The maximal predicted heart rate was 148 bpm. The rate-pressure product for the peak heart rate and blood pressure was 27720 mm Hg/min." The stress ECG states: "Duke scoring: exercise time of 7.92 min; maximum ST deviation of

At the bottom, it says "Patients: Radke, Phill MRN: 433627 (MRN) Module: Nuclear cardiology DOS: 02/15/2013 01:45 AM; Status: In progress User: Abrahams, Tim, MD".

Clicking Close in the Prior Studies section will return to displaying just the current study.

ASCEND Report - Current unsigned - Saved on 11/08/2015 12:16 Edit Close

ASCEND General Hospital
1234 Main St. Anywhere, USA 02345
Phone: (800) 555-1234
Fax: (800) 555-1235

Bruce protocol

Patient: Phill Radke
MRN: #433627 (MRN)
Accession: #989898

Study date: 02/15/2013
Birth date: 06/29/1940
Age: 72 yr

Height:
Weight:
BSA:

Summary:
1. Stress ECG conclusions: Duke scoring: exercise time of 7.92 min; maximum ST deviation of 6.8 mm; .

History: Allergies: No known allergies.

Study data: Study status: Elective. Procedure: Treadmill exercise testing was performed using the Bruce protocol. The patient exercised for 7 min 55 sec, to a maximal work rate of 9.1 mets. Exercise was terminated due to fatigue and dizziness.

Stress protocol:

Stage	HR	BP (mmHg)
SUPINE	60	120/80 (93)
STANDING	60	120/80 (93)
START EXE	60	120/80 (93)
STAGE 2	80	126/79 (95)
STAGE 3	120	148/95 (113)
PEAK EXE	180	154/104 (121)
END REC	60	137/86 (103)

Stress results: Maximal heart rate during stress was 180 bpm (122% of maximal predicted heart rate). The maximal predicted heart rate was 148 bpm. The rate-pressure product for the peak heart rate and blood pressure was 27720 mm Hg/min.

Stress ECG: Duke scoring: exercise time of 7.92 min; maximum ST deviation of 6.8 mm; .

Report has not been signed

Patient: Radke, Phill MRN: 433627 (MRN) Module: Nuclear cardiology DOS: 02/15/2013 01:45 AM; Status: In progress User: Abrahams, Tim, MD

If you wish to edit the selected study, clicking the **Edit** button will open the study in the ASCEND CV reporting interface. Note that if the study is currently opened for reporting by another user, and if your ASCEND CV lab administrator has configured the application to allow reporting users to force close other studies, after clicking **Edit** you will be prompted to selectively terminate the editing session of the competing user along with an indication of how long that other user's session has been idle.

Assigning a study

Selecting a study from the worklist and clicking the **Assign** button displays the participants for the study and allows you to assign participants to roles. See the *Participants button* section of this Guide for details.

Participants

Show only: East Campus ☒ Echocardiography ☒ Role ☒

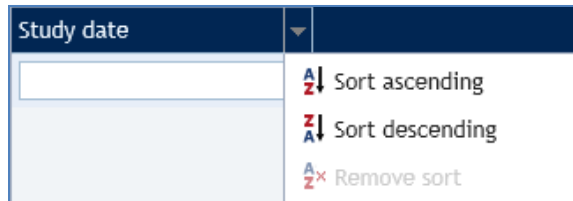
Role	Participant
Responsible physician	[none]
Preliminary signer	[none]
Sonographer	Brooks, Jerome X, V TEC
Ordering physician	Abrahams, Tim, MD
Practice	[none]


Ok Cancel

Managing worklist views

You can configure the worklist to meet your needs:

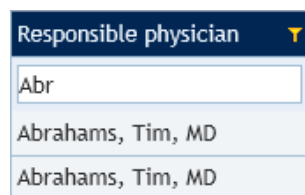
- The worklist can be **sorted by column entry**. Mousing over a column heading displays a down arrow. Clicking the down arrow displays a list of sort options.



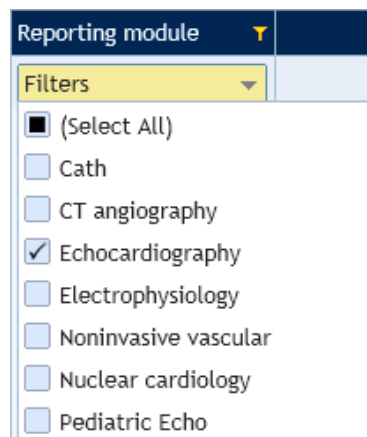
The sorted column will display an arrow icon  to indicate that it is being sorted.




- The worklist can be **filtered by column entry**. Entering text/numbers in a text/numeric column's filter box (below the column heading) displays only those studies that contain the specified text/numbers in the specified field (the studies that contain "Abr" in *Responsible physician* column in the example below).

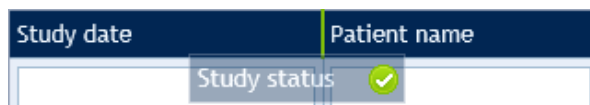


Columns with predefined options can be filtered by selecting one or more choices from the associated filter list. Note that, after selecting choices, you may need to click somewhere else on the worklist to close the filter list.

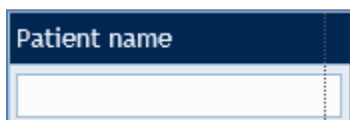


In either case, the filtered column will display a funnel icon  to indicate that it is being filtered.

- The worklist **columns can be reordered**. To reposition a column in the worklist, drag its column heading (*Study status* in the example below) to a new location and drop it.



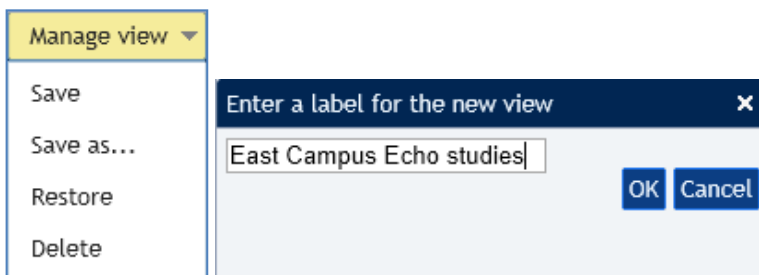
- The worklist **column widths can be adjusted**. To narrow/widen a column, grab its column divider (the dotted line in the example below) and drag it left/right.



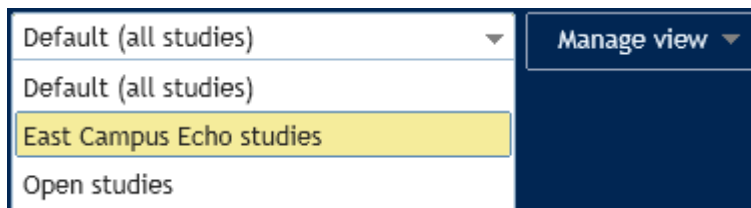
Once you have a worklist configuration that you like, you can save it as a named **worklist view** for future use. The example below shows a worklist containing open (unsigned) Echocardiography studies performed at the East Campus sorted by study date/time.

Facility	Reporting module	Study status	Study date	Patient name
Filters	Filters	Filters		
East Campus	Echocardiography	For overread	10/8/2013 12:00 AM	Simpson, Marge
East Campus	Echocardiography	In progress	2/13/2013 9:01 AM	Carson, Mitchell

This view can be saved as an “East Campus Echo studies” worklist view by clicking the **Manage view** button, selecting **Save as...**, and specifying the name of the new view.



The “East Campus Echo studies” view is then available in the **worklist view** selector.



Administering a study

(Requires Lab Administrator privileges)

Selecting a study from the worklist and clicking the **Administer** button displays a form containing information about the study (*Order*, *Case*, and *Study* blocks) and the associated patient (*Patient* and *Admission* blocks). Note that the **Administer** button will only be displayed on the worklist if you have *Lab Administrator* privileges.

Editing study data

The study fields with **black** text are editable. The fields with **gray** text are presented for review only. Click the **Save** button to save the edited study data.

Administer - Case editor

Admission

Account number10039470

Arrival date/time03/06/2012 07:23 AM

AdmissionInpatient

Order

Accession number698aod964

Study instance ID1.2.888.777777.6666.1.99999999.4.2

Placer order number35936202

Ordered date/time09/05/2012 04:58 PM

Universal service IDEchoStudy [Echo]

UrgencyRoutine

External ID

Order status

Order canceled reason

FacilityEast Campus

Patient

Lowell, Ralph Julius

MRN: 648379 (MRN)

DOB: 01/27/1943

Edit patient

Change patient

Case

Lab discharge date/time03/06/2012 01:01 PM

Location performed

Procedure room

Encounter MRN648379

Study

Start date/time02/13/2013 09:01 AM

Stop date/time

Cancel order

Reset study

Download study xml

Save

Cancel

Editing patient data

Clicking the **Edit patient** button displays a form for editing data about the patient associated with the study.

Administer - Case editor: Patient demographics

Lowell, Ralph Julius

This patient record is shared by all of the studies associated with this patient.
This form should only be used to update patient information.
To change the patient associated with this study, use the **Change patient** function.

ID	533	SSN	123232123
Salutation		MPI	
First name	Ralph	Universal record #	
Middle name	Julius		
Last name	Lowell		
Family suffix			
Professional suffix			
Address 1	2130 Revolutionary Avenue		
Address 2			
City	Newton Heights		
State / province	MI		
Zip / postal code	11111		
Country			
Email			
Business #	(787)777-8888		
Home #	(787)878-7878		
Fax #			
Birth date	01/27/1943		
Birth gender	Male		
Ethnicity	Unknown		
Race	Black		
Marital status	Married		
Primary language	English		

☐ Foreign health insurance
☐ Indian health service
☐ Medicaid
☐ Medicare
☐ Military health care
☐ No health insurance
☐ Private health insurance
☐ State specific health care plan

Death indicator

Death date/time

Assigning authority	Type	ID
MRN	MRN	648379

New **Delete**

Ok **Cancel**

Note that this patient data record is shared by all the ASCEND CV studies for the patient. This form should only be used to update information on the selected patient, not to change the patient associated with the study.

Clicking the **Change patient** button displays a form for selecting a different patient for the study. Adjust the name or portion of the name you are searching for in the Search: text box to constrain the list of patients to select from.

Administer - Case editor: Patient selector

Search:

Name	MRN	DOB
Carson, Mitchell	3162935	12/25/1947
Howse, Milford Linton	1366354	03/29/1932
Lieblisches, Herz M	1234567	09/19/1953
Lowell, Ralph Julius	648379	01/27/1943
Norris, Steve Avery	1365396	06/25/1949
Radke, Phill	433627	06/29/1940
Rains, Mya Shawna	1365397	09/25/1952
Simpson, Homer Jay	1	01/01/1956
Simpson, Marge	2	12/12/1956
Styles, Hilary Harding	1365398	08/05/2002
Tanner, Evan	433627c	10/11/1973
Wickham, Roland	3332355	08/17/1975

Clicking the **New** button displays a form for entering a new patient for the study.

Administer - Case editor: Patient demographics

Salutation

! First name

Middle name

! Last name

Family suffix

Professional suffix

Address 1

Address 2

City

State / province

Zip / postal code

Country

Email

Business #

Home #

Fax #

! Birth date

Birth gender

Ethnicity

Race

Marital status

Primary language

! SSN

! MPI

! Universal record #

☐ Foreign health insurance

☐ Indian health service

☐ Medicaid

☐ Medicare

☐ Military health care

☐ No health insurance

☐ Private health insurance

☐ State specific health care plan

Death indicator

Death date/time

! A minimum of one identifier is required.

Assigning authority	Type	ID
No data available in table		

! Required field is empty or invalid

The fields marked with a red ! are required and must be specified. Note that you must specify at least one patient identifier – social security number (SSN), master patient index number (MPI), universal record number, or medical record number (MRN) – using either a named field or the patient identifier panel.

Assigning authority	Type	ID
MRN	MRN	3162935
<div></div>		
<div>New</div>		

Canceling a study

Clicking the **Cancel order** button cancels the study. You might use this option if an ordered study will not be performed for some reason. Note that only unsigned studies can be canceled. If no data has been recorded for the study (beyond the data imported with the order), then the study is removed from the ASCEND CV database. Otherwise, the study is marked as ‘*canceled*’ but the associated data is retained in the ASCEND CV database.

Resetting a study

Clicking the **Reset study** button returns a study back to its initial state immediately after processing of the associated order. Note that resetting a study deletes all data imported from clinical devices and all recorded findings. Only unsigned studies can be reset.

Reset study

Edit and resubmit order

The case will be completely deleted, including the associated order and all recorded findings, imported device data, and imported secondary capture images. All studies associated with the case will be deleted. Following reset, you can edit the original order to correct errors and the revised order will be resubmitted. Device data will not be reimported automatically, but can be reimported manually. Secondary capture images will not be reimported automatically and must be recaptured.

Use case: The order has an incorrect patient or study identifier (e.g., MRN, Accession#, USID)

Reset study

All recorded findings, imported device data, and imported secondary capture images will be deleted, but the original order will be retained. Device data will not be reimported automatically, but can be reimported manually. Secondary capture images will not be reimported automatically and must be recaptured.

Use case: Incorrect device data was imported

Cancel

Clicking the **Reset study** button resets the study by (re)processing the original order. You might use this option to reset a study if incorrect device data was imported or a large number of incorrect findings recorded.

Clicking the **Edit and resubmit order** button displays the **Administer** form (shown above) allowing editing of order data before the order is (re)processed. Note that, in this case, all the study fields on the **Administer** form will be editable. You might use this option to reset a study if the original order contained an incorrect study identifier (Accession #, facility, or Universal Service ID).



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