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**HIMSS and RSNA**  
**Integrating the Healthcare Enterprise**

**IHE Tests: Radiology Transaction  
Sequences**

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## 1 Introduction

The MESA tests include a number of cases each of which rely on a sequence of messages between actors. These tests range across different integration profiles:

- Scheduled Patient Workflow
- Patient Information Reconciliation
- Presentation of Grouped Procedures
- Charge Posting
- Postprocessing Workflow
- Reporting Workflow

This document lists the transactions and messages for a number of cases. It may not describe the clinical scenario behind each case, but listing the transactions should clearly define what is expected of each actor. These are all of the transactions involving all of the actors. When you test with your particular actor, you may see only a subset of these messages.

Some of the messages need to appear in the order listed in this document. For example, patient registration must precede order messages. In other instances, some messages may appear in a slightly different sequence. Our document typically lists MPPS N-Create, MPPS N-Set and Image C-Store as a sequence of messages. Some equipment may begin the storage process before the final MPPS N-Set message.

You can see an HTML version of the messages by opening the file:

*\$MESA\_TARGET/ mesa\_tests/rad/msgs/index.html* with a web browser.

This document lists test sequences but does not define required sequences for your actor or actors. Those requirements are listed in separate documents (a spreadsheet that lists test requirements in table form and separate test documents that provide test instructions for each actor).

### 1.1 Patient Identification

The tests involve a small set of patients. In some of the tests, we update patient names. The table below is a list of patients and patient IDs used in the tests.

Patient ID (ADT)	Temp Patient ID (Order Filler)	Last Name	First Name	Test Number
583020		WHITE	CHARLES	101
583030		BROWN	JAMES	102
583040		BLUE	ERICA	104
583050		GREEN	CATHY	106

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583060		ROSE	WILLIAM	107
583070		BLACK	CHARLES	131
583080		GREY	FRANK	109
583090		GOLD	LISA	110
583095		PEACH	SARAH	111
583295		SILVERHEELS	JAY	103
583085		MUSTARD	STEPHEN	105
583110		WISTERIA	MATTHEW	132
583120		INDIGO		133
583130		PERIWINKLE	JOE	151
583152		MAGENTA	ROB	152
		VIOLET		
		ROYAL		
		PLUM		
		LIME		
		TEAL		
		SCARLET		
		LEMON		
583295	T9020	DOE	J1	
583045		DOE	J3	
585125		DOE	J133	133
M4000		KING	MARTIN	
M4010		QUEEN	MARY	
C1301		ALABAMA	MONTGOMERY	
C1302		ALASKA	JUNEAU	
C1303		ARIZONA	PHOENIX	
C3104		ARKANSAS	LITTLEROCK	
C1305		CALIFORNIA	SACRAMENTO	
C1306		COLORADO	DENVER	
901411		CONNECTICUT	HARTFORD	
901412		DELAWARE	DOVER	
901413		FLORIDA	TALLAHASSEE	
901414		GEORGIA	ATLANTA	

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901415		HAWAII	HONOLULU	
		IDAHO	BOISE	
401601		WASHINGTON	GEORGE	1601
401602				
401603		LINCOLN	ABRAHAM	1603
S1240		BOSTON	BOB	1240

## **2 Test Cases**

This section describes the test cases that constitute the Transaction Sequences. Each test case involves a series of transactions involving one test patient. Some patients may require that a single actor participate in multiple transactions. The tables in this section give the order of messages for an integrated system with all actors. This is provided as a centralized reference. To test an individual IHE actor, refer to the appropriate test document.

## 2.1 Test Case 100: MWL Tests for Order Filler

This test is designed specifically for an Order Filler to exercise Modality Worklist functions. Order Fillers will need to have proper responses to MWL queries to complete the remaining tests. The steps are documented here for consistency with other tests.

Identifier	Description	Source	Destination
100.102.a04.adt	A04: Register KING as outpatient	ADT	Ord Plc, Ord Fil
100.104.a04.adt	A04: Register QUEEN as outpatient	ADT	Ord Plc, Ord Fil
100.106.o01.orm	ORM: Order P1 for KING	Ord Plc	OF
100.108.o01.orm	ORM: Order P22 for KING	Ord Plc	OF
100.110.o01.orm	ORM: Order P4 for QUEEN	Ord Plc	OF
100.112.o01.orm	ORM: Order P8 for QUEEN	Ord Plc	OF
100.114.dcm	MWL query for KING (2 results)	Modality	OF
100.116.dcm	MWL query for all MR exams (5 results, two exams have 2 SPS)	Modality	OF
100.118.dcm	MWL query for all RT exams (one result)	Modality	OF
100.120.dcm	MWL query for all CT exams (zero results)	Modality	OF
100.122.dcm	MWL query for all exams scheduled for MODALITY1 (the MR system)	Modality	OF
100.124.dcm	MWL query for all exams scheduled for MODALITY2 (the RT system)	Modality	OF

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## 2.2 Test Case 101: Scheduled / Unidentified #5

Test Case 101 involves transactions for the patient Charles White. This patient will have work as both an identified and an unidentified patient. The table below gives the overview of the test case.

Identifier	Description	Source	Destination
101.102.a04.adt	A04: Register WHITE as outpatient (Patient Class = 'E')	ADT	Ord Plc, Ord Fil
101.104.o01.orm	ORM: Order P1 for White	Ord Plc	OF
101.106.o01.orm	ORM: Schedule X1	Ord Fil	Im Mgr
101.108.dcm	MWL C-Find	Modality	OF
101.110.dcm	PPS: Begin procedure(X1)	Modality	PPS Mgr
101.112.dcm	PPS: Begin procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
101.114.dcm	PPS: End procedure (X1)	Modality	PPS Mgr
101.116.dcm	PPS: End procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
	C-Find: Images available query	Modality	Img Mgr
101.118.dcm	C-Store (Images)	Modality	Img Mgr
101.120.dcm	C-Find: Images available query	Ord Fil	Img Mgr
101.122.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
101.124.dcm	Storage Commitment (N-Event Report)	Img Mgr	Modality
101.126.a06.adt	A06: Change WHITE outpatient : inpatient	ADT	Ord Plc, Ord Fil
101.128.a06.adt	A06: Change WHITE outpatient : inpatient	Ord Fil	Img Mgr
101.130.a03.adt	A03: Discharge WHITE	ADT	Ord Plc, Ord Fil
101.132.a03.adt	A03: Discharge WHITE	Ord Fil	Img Mgr
	Unidentified Case #5		
	Predefined list has name = SUNDAY^J1	ID from Ord Filler: T9020	
101.142.dcm	PPS: Begin procedure (X2)	Modality	PPS Mgr
101.144.dcm	PPS: Begin procedure (X2)	PPS Mgr	Img Mgr or Ord Fil
101.146.dcm	PPS: End procedure (X2)	Modality	PPS Mgr
101.148.dcm	PPS: End procedure (X2)	PPS Mgr	Img Mgr or Ord Fil
101.150.dcm	C-Store (Images)	Modality	Img Mgr
101.152.dcm	C-Find: Images available query	Ord Fil	Img Mgr
101.154.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
101.156.dcm	Storage Commitment (N-Event Report)	Img Mgr	Modality
101.158.dcm	C-Find to Image Manager (query SUNDAY)	Im Disp	Img Mgr

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101.160.a04.adt	A04: Register DOE^J2 as outpatient (Patient Class = 'E')	ADT	Ord Plc, Ord Fil
101.161.a40.adt	A40: Update Merge DOE^J2 with temp patient	Ord Fil	Img Mgr
	After the fact scheduling at Order Filler		
101.162.o01.orm	ORM: Request procedure P2	Ord Fil	Ord Plc
101.164.o02.orr	ORR: Return Placer Order Number	Ord Plc	Ord Fil
101.165.o01.orm	ORM: After the fact scheduling	Ord Fil	Img Mgr
101.166.a40.adt	A40: Merge WHITE with DOE^J2	ADT	Ord Plc, Ord Fil
101.168.a40.adt	A40: Merge WHITE with DOE^J2	Ord Fil	Img Mgr
101.170.dcm	C-Find: Query Img Mgr for updated patient	Img Disp	Img Mgr
	A new round of orders for WHITE		
101.182.o01.orm	ORM: Order P21	Ord Plc	Ord Fil
101.184.o01.orm	ORM: Schedule X21	Ord Fil	Img Mgr
101.186.dcm	MWL C-Find (test Order Filler MWL)	Modality	Ord Fil
101.188.o01.orm	ORM: Cancel P21	Ord Plc	Ord Fil
101.190.o01.orm	ORM: Cancel X21	Ord Fil	Img Mgr
101.192.o01.orm	ORM: Order P22	Ord Plc	Ord Fil
101.194.o01.orm	ORM: Schedule X22	Ord Fil	Img Mgr
101.196.dcm	MWL C-Find (test Order Filler MWL)	Modality	Ord Fil
	Don't bother to run the procedures		

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## 2.3 Test Case 102: Pre-reg/Order Cancel/Reorder

Case 102 involves the patient Brown. This case will test pre-registration and order cancellation and re-ordering at the Order Filler.

Identifier	Description	Source	Destination
102.102.a05.adt	A05: Pre-register BROWN	ADT	Ord Plc, Ord Fil
102.104.o01.orm	ORM: Order P1	Ord Plc	Ord Fil
102.106.o01.orm	ORM: Schedule X1	Ord Fil	Img Mgr
102.108.a01.adt	A01: Admit BROWN (inpatient)	ADT	Ord Plc, Ord Fil
102.110.dcm	MWL C-Find	Modality	Ord Fil
	Modality will perform X11 rather than X1		
102.112.dcm	PPS: Begin procedure (X11)	Modality	PPS Mgr
102.114.dcm	PPS: End procedure (X11)	Modality	PPS Mgr
102.116.dcm	C-Store (Images)	Modality	Img Mgr
102.118.dcm	Storage Commitment N-Action	Modality	Img Mgr
102.120.dcm	Storage Commitment N-Event	Img Mgr	Modality
102.121.dcm	Image Display C-Find	Img Disp	Img Mgr
	New sequence at Ord Fil/Ord Plc		
102.122.o01.orm	ORM: Order P21	Ord Plc	Ord Fil
102.124.o01.orm	ORM: Schedule X21	Ord Fil	Img Mgr
102.125.dcm	MWL C-Find	Modality	Ord Fil
102.126.o01.orm	ORM: Cancel X21	Ord Fil	Ord Plc
102.128.o01.orm	ORM: Status Update (Cancel X21)	Ord Fil	Img Mgr
102.129.dcm	MWL C-Find	Modality	Ord Fil
102.130.o01.orm	ORM: Order P22	Ord Fil	Ord Plc
102.132.o02.orm	ORR: Placer Order Number	Ord Plc	Ord Fil
102.134.o01.orm	ORM: Schedule X22	Ord Fil	Img Mgr
102.135.dcm	MWL C-Find	Modality	Ord Fil
	Skip the imaging part		
102.136.a03.adt	A03: Discharge BROWN	ADT	Ord Plc, Ord Fil
102.138.a03.adt	A03: Discharge BROWN	Ord Fil	Img Mgr

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## 2.4 Test Case 103: PIR Case 1: Unidentified Patient Registered at ADT and Ordered at the Order Placer

Test Case 103 involves transactions for the patient Jay Silverheels and tests the Unidentified Case 1: Unidentified Patient Registered at ADT and Ordered at the Order Placer (see IHE TF Vol I, section 4.4.1). The table below gives the overview of the test case.

Identifier	Description	Source	Destination
	Unidentified case 1		
103.102.a04.adt	A04: Register DOE^J1 (Patient Class = 'E')	ADT	Ord Plc, Ord Fil
103.104.o01.orm	ORM: Order P1 (one procedure)	Ord Plc	Ord Fil
103.106.o01.orm	ORM: Schedule X1 (one SPS, one AI)	Ord Fil	Img Mgr
103.108.dcm	MWL C-Find	Mod	Ord Fil
103.110.dcm	PPS: Begin procedure	Mod	PPS Mgr
103.112.dcm	PPS: End procedure	Mod	PPS Mgr
103.114.dcm	C-Store (images)	Mod	Img Mgr
103.116.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
103.118.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
103.120.dcm	C-Find	Img Disp	Img Mgr
	Patient is now recognized as Silverheels		
103.130.a08.adt	A08: Update name to SILVERHEELS	ADT	Ord Plc, Ord Fil
103.132.a08.adt	A08: Update name to SILVERHEELS	Ord Fil	Img Mgr
103.134.dcm	C-Find	Img Disp	Img Mgr

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## 2.5 Test Case 104: Unidentified #2 / Multiple SPS

Case 104 has a requested procedure with 2 scheduled procedure steps and 3 action items and includes Unidentified Patient Case #2 (with a patient merge rather than update).

In the first part of the test, the Order Placer sends a request for Procedure P4. The filler expands this request into two Scheduled Procedure Steps. The first SPS has one action item/protocol item; the second SPS has two action items/protocol items.

Identifier	Description	Source	Destination
104.102.a04.adt	ADT A04: Register BLUE as outpatient (Patient Class = 'E')	ADT	Ord Pl, Ord Fil
104.104.o01.orm	ORM: Order P4 (one procedure)	Ord Pl	Ord Fil
104.106.o01.orm	ORM: Schedule X4 (two SPS, three AI)	Ord Fil	Img Mgr
104.108.dcm	MWL C-Find	Modality	Ord Fil
104.110.dcm	PPS: Begin procedure	Modality	PPS Mgr
104.112.dcm	PPS: End procedure	Modality	PPS Mgr
104.114.dcm	C-Store (Images)	Modality	Img Mgr
104.116.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
104.118.dcm	Storage Commitment (N-Event)	Img Mgr	Modality
	Unidentified case #2		
104.142.a04.adt	ADT: A04 Register DOE^J3	ADT	Ord Plc, Ord Fil
104.144.o01.orm	ORM: Order P1 (one procedure)	Ord Fil	Ord Plc
104.146.o02.orr	ORR: Placer Order Number	Ord Plc	Ord Fil
104.148.o01.orm	ORM: Schedule X1 (one SPS, one AI)	Ord Fil	Img Mgr
	Perform X1 at Modality		
104.150.dcm	MWL C-Find	Modality	Ord Fil
104.152.dcm	PPS: Begin procedure	Modality	PPS Mgr
104.154.dcm	PPS: End procedure	Modality	PPS Mgr
104.156.dcm	C-Store (Images)	Modality	Img Mgr
104.158.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
104.160.dcm	Storage Commitment (N-Event)	Img Mgr	Modality
104.162.dcm	C-Find on Patient BLUE	Workstation	Img Mgr
104.164.dcm	C-Find on Patient DOE	Workstation	Img Mgr
	Patient is recognized as BLUE		
104.182.a40.adt	A40: Merge BLUE with DOE^J3	ADT	Ord Plc, Ord Fil
104.184.a40.adt	A40: Merge BLUE with DOE^J3	Ord Fil	Img Mgr
104.190.dcm	C-Find on Patient BLUE	Workstation	Image Manager

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## 2.6 Test Case 105: PIR Case #3: Unidentified Patient Registered at ADT but Completed at Modality Prior to Order

Test Case 105 involves transactions for the patient Stephen Mustard and tests the Unidentified Case 3: Unidentified Patient Registered at ADT but Completed at Modality Prior to Order (see IHE TF Vol I, section 4.4.3). The table below gives the overview of the test case.

Note that the Study Instance UID is generated by the Modality.

Identifier	Description	Source	Destination
105.102.a04.adt	A04: Register DOE^J105 as outpatient (Patient Class = 'E')	ADT	Ord Plc
105.103.a04.adt	A04: Register DOE^J105 as outpatient	ADT	Ord Fil
	Perform X2 at modality, no MWL		
105.104.dcm	PPS: Begin procedure	Modality	PPS Mgr
105.106.dcm	PPS: End procedure	Modality	PPS Mgr
105.108.dcm	C-Store (Images)	Modality	Img Mgr
105.108.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
105.110.dcm	Storage Commitment (N-Event)	Img Mgr	Modality
105.112.dcm	C-Find	Img Disp	Img Mgr
105.114.o01.orm	ORM: Order P2 (one procedure)	Ord Fil	Ord Plc
105.116.o02.orr	ORR: Placer Order Number	Ord Plc	Ord Fil
105.118.o01.orm	ORM: Schedule X2 (one SPS, one AI)	Ord Fil	Img Mgr
	Patient is now identified as MUSTARD		
105.120.a08.adt	A08: Rename DOE^J105 to MUSTARD	ADT	Ord Plc
105.121.a08.adt	A08: Rename DOE^J105 to MUSTARD	ADT	Ord Fil
105.122.a08.adt	A08: Rename DOE^J105 to MUSTARD	Ord Fil	Img Mgr
105.124.dcm	C-Find	Img Disp	Img Mgr

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## 2.7 Test Case 106: Presentation of Grouped Proc

Presentation of Grouped Procedures. Two separate procedures are ordered and scheduled. Modality performs a single procedure and sends GSPS objects to distinguish the procedures.

Identifier	Description	Source	Destination
106.102.a04.adt	ADT A06: Register GREEN as outpatient (Patient Class = 'E')	ADT	Ord Pl, Ord Fil
106.104.o01.orm	ORM: Order P6 (one procedure)	Ord Pl	Ord Fil
106.106.o01.orm	ORM: Order P7 (one procedure)	Ord Pl	Ord Fil
106.108.o01.orm	ORM: Schedule X6	Ord Fil	Img Mgr
106.110.o01.orm	ORM: Schedule X7	Ord Fil	Img Mgr
106.112.dcm	MWL C-Find	Modality	Ord Fil
106.114.dcm	PPS: Begin procedure (X6, X7 combined)	Modality	PPS Mgr
106.116.dcm	PPS: End procedure (X6, X7 combined)	Modality	PPS Mgr
106.118.dcm	C-Store (Images)	Modality	Img Mgr
106.120.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
106.122.dcm	Storage Commitment (N-Event)	Img Mgr	Modality
106.126.dcm	PPS: Begin procedure (GSPS X6)	Modality	PPS Mgr
106.128.dcm	PPS: End procedure (GSPS X6)	Modality	PPS Mgr
106.130.dcm	C-Store (GSPS X6)	Modality	Img Mgr
106.132.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
106.134.dcm	Storage Commitment (N-Event)	Img Mgr	Modality
106.136.dcm	PPS: Begin procedure (GSPS X7)	Modality	PPS Mgr
106.138.dcm	PPS: End procedure (GSPS X7)	Modality	PPS Mgr
106.140.dcm	C-Store (GSPS X7)	Modality	Img Mgr
106.142.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
106.144.dcm	Storage Commitment (N-Event)	Img Mgr	Modality

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## 2.8 Test Case 107: Status Update

This test is for the Status Update from the Order Filler to the Order Placer.

Identifier	Description	Source	Destination
107.102.a04.adt	ADT A04: Register ROSE as outpatient (Patient Class = 'E')	ADT	Ord Pl, Ord Fil
107.104.o01.orm	ORM: Order P6 (one procedure)	Ord Pl	Ord Fil
107.106.o01.orm	ORM: Schedule X6	Ord Fil	Img Mgr
107.108.dcm	MWL C-Find	Modality	Ord Fil
107.110.dcm	PPS: Begin procedure (X6)	Modality	PPS Mgr
107.112.o01.orm	ORM: Status Update	Ord Fil	Ord Plc
107.114.dcm	PPS: End procedure (X6)	Modality	PPS Mgr
	<i>Order Filler decides that procedure is completed</i>		
107.116.o01.orm	ORM: Status Update	Ord Fil	Ord Plc

## 2.9 Test Case 108: Black

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## 2.10 Test Case 109: Exception Management

This is the text for Exception Management for Order Filler and Image Manager systems.

Reference: Rad TF 1: 3.3.4.

Identifier	Description	Source	Destination
109.102.a04.adt	ADT A04: Register GREY as outpatient (Patient Class = 'O')	ADT	Ord Pl, Ord Fil
109.104.o01.orm	ORM: Order P1 (one procedure)	Ord Pl	Ord Fil
109.106.o01.orm	ORM: Schedule X1	Ord Fil	Img Mgr
109.108.dcm	MWL C-Find	Modality	Ord Fil
109.110.dcm	PPS: Begin procedure (X1)	Modality	PPS Mgr
109.112.dcm	PPS: End procedure (X1)	Modality	PPS Mgr

## 2.11 Test Case 110: Billing and Material Management Option

This is the text for Billing and Material Management option for Order Filler systems.

Identifier	Description	Source	Destination
110.102.a04.adt	ADT A04: Register GREY as outpatient (Patient Class = 'O')	ADT	Ord Pl
110.104.a04.adt	ADT A04: Register GOLD as outpatient (Patient Class = 'O')	ADT	Ord Fil
110.106.o01.orm	ORM: Order P1 (one procedure)	Ord Pl	Ord Fil
110.108.o01.orm	ORM: Schedule X1	Ord Fil	Img Mgr
110.110.dcm	MWL C-Find	Modality	Ord Fil
110.112.dcm	PPS: Begin procedure (X1)	Modality	PPS Mgr
110.114.dcm	PPS: End procedure (X1)	Modality	PPS Mgr

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## 2.12 Test Case 111: Performed Work Status Update

111.102.a04.adt	A04: Register PEACH as outpatient (patient class = 'O')	ADT	Ord Plc
111.104.a04.adt	A04: Register PEACH as outpatient (patient class = 'O')	ADT	Ord Fil
111.106.o01.orm	ORM: Order P101 for PEACJ	Ord Plc	Ord Fil
111.108.o01.orm	ORM: Schedule X101	Ord Fil	Im Mgr
111.110.dcm	MWL C-Find	Modality	OF
111.112.dcm	PPS: Begin procedure (X101)	Modality	PPS Mgr
111.114.dcm	PPS: Begin procedure (X101)	PPS Mgr	Img Mgr or Ord Fil
111.116.dcm	C-Store (images)	Mod	Img Mgr
111.118.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
111.120.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
	Schedule Mammography CAD	PPM	
111.122.dcm	GPWL C-Find	Img Crt	PPM
111.124.dcm	N-Action: Claim Workitem	Img Crt	PPM
111.126.dcm	PPS: Performed Work Status Update	PPM	Order Filler / Img Mgr
111.128.dcm	PPS: Workitem PPS in progress	Img Crt	PPM
111.130.dcm	PPS: Workitem PPS complete	Img Crt	PPM
111.132.dcm	N-Action: Workitem Completed	Img Crt	PPM
111.134.dcm	PPS: Performed Work Status Update	PPM	Order Filler / Img Mgr
111.136.dcm	C-Store (Evidence documents)	Img Crt	Img Mgr
111.138.dcm	Storage Commitment (N-Action)	Img Crt	Img Mgr
111.140.dcm	Storage Commitment (N-Event)	Img Mgr	Img Crt

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## 2.13 Test Case 131: Administrative and Procedure Performance Process Flow

Test Case 131 involves transactions for the patient Charles Black and tests the Administrative Procedure Performance Process Flow (see IHE TF Vol I, section 3.3.1). The table below gives the overview of the test case.

Identifier	Description	Source	Destination
131.102.a04.adt	A04: Register BLACK as outpatient (Patient Class = 'E')	ADT	Ord Plc, Ord Fil
131.104.o01.orm	ORM: Order P1 for BLACK	Ord Plc	OF
131.106.o01.orm	ORM: Schedule X1	Ord Fil	Im Mgr
131.108.dcm	MWL C-Find	Modality	OF
131.110.dcm	PPS: Begin procedure(X1)	Modality	PPS Mgr
131.112.dcm	PPS: Begin procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
131.114.dcm	PPS: End procedure (X1)	Modality	PPS Mgr
131.116.dcm	PPS: End procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
	C-Find: Images available query	Order Filler	Img Mgr
131.118.dcm	C-Store (Images)	Modality	Img Mgr
131.120.dcm	C-Find: Images available query	Ord Fil	Img Mgr
131.122.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
131.124.dcm	Storage Commitment (N-Event Report)	Img Mgr	Modality

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## 2.14 Test Case 132: Order Change Flow Initiated by Order Filler

Case 132 involves the patient WISTERIA. This case will test order cancellation and re-ordering at the Order Filler (see IHE TF Vol I, section 3.3.3. The table below gives the overview of the test case.

Identifier	Description	Source	Destination
132.102.a01.adt	A01: Admit WISTERIA	ADT	Ord Plc
132.103.a01.adt	A01: Admit WISTERIA	ADT	Ord Fil
132.104.o01.orm	ORM: Order P22	Ord Plc	Ord Fil
132.106.o01.orm	ORM: Schedule X22	Ord Fil	Img Mgr
132.108.dcm	MWL C-Find	Modality	Ord Fil
132.110.o01.orm	ORM: Cancel X22	Ord Fil	Ord Plc
132.112.o01.orm	ORM: Status Update (Cancel X22)	Ord Fil	Img Mgr
132.114.dcm	MWL C-Find	Modality	Ord Fil
132.116.o01.orm	ORM: Order P1	Ord Fil	Ord Plc
132.118.o02.orm	ORR: Placer Order Number	Ord Plc	Ord Fil
132.119.o01.orm	Extra order required for MESA tools		
132.120.o01.orm	ORM: Schedule X1	Ord Fil	Img Mgr
132.122.dcm	MWL C-Find	Modality	Ord Fil
132.124.dcm	PPS: Begin procedure(X1)	Modality	PPS Mgr
132.126.dcm	PPS: Begin procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
132.128.dcm	PPS: End procedure (X1)	Modality	PPS Mgr
132.130.dcm	PPS: End procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
132.132.dcm	C-Find: Images available query	Modality	Img Mgr
132.134.dcm	C-Store (Images)	Modality	Img Mgr
132.136.dcm	C-Find: Images available query	Ord Fil	Img Mgr
132.138.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
132.140.dcm	Storage Commitment (N-Event Report)	Img Mgr	Modality
132.142.a03.adt	A03: Discharge WISTERIA	ADT	Ord Plc
132.143.a03.adt	A03: Discharge WISTERIA	ADT	Ord Fil

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## 2.15 Test Case 133: PIR Case 2: Unidentified Patient Registered at ADT and Ordered at Department System Scheduler/Order Filler

Test Case 133 involves transactions for the patient Ivan Indigo and tests the Unidentified Case 2: Unidentified Patient Registered at ADT and Ordered at the DSS/Order Filler (see IHE TF Vol I, section 4.4.2). The table below gives the overview of the test case.

Identifier	Description	Source	Destination
133.102.a04.adt	ADT A04: Register INDIGO as outpatient (Patient Class = 'E')	ADT	Ord Pl
133.103.a04.adt	ADT A04: Register INDIGO as outpatient	ADT	OrdFil
	Indigo leaves, to return later as unidentified patient		
	Unidentified case #2		
133.142.a04.adt	ADT: A04 Register DOE^J133	ADT	Ord Plc
133.143.a04.adt	ADT: A04: Register DOE^J133	ADT	Ord Fil
133.144.o01.orm	ORM: Order P1 (one procedure)	Ord Fil	Ord Plc
133.146.o02.orr	ORR: Placer Order Number	Ord Plc	Ord Fil
133.148.o01.orm	ORM: Schedule X1 (one SPS, one Protocol Code Item)	Ord Fil	Img Mgr
133.150.dcm	MWL C-Find	Modality	Ord Fil
	Perform X1 at Modality		
133.152.dcm	PPS: Begin procedure	Modality	PPS Mgr
133.154.dcm	PPS: End procedure	Modality	PPS Mgr
133.156.dcm	C-Store (Images)	Modality	Img Mgr
133.158.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
133.160.dcm	Storage Commitment (N-Event)	Img Mgr	Modality
133.162.dcm	C-Find on Patient INDIGO	Workstation	Img Mgr
133.164.dcm	C-Find on Patient DOE^J133	Workstation	Img Mgr
	Patient is recognized as BLUE		
133.182.a40.adt	A40: Merge INDIGO with DOE^J133	ADT	Ord Plc
133.183.140.adt	A40: Merge INDIGO with DOE^J133	ADT	Ord Fil
133.184.a40.adt	A40: Merge INDIGO with DOE^J133	Ord Fil	Img Mgr
133.190.dcm	C-Find on Patient INDIGO	Workstation	Image Manager

## 2.16 Test Case 141: Administrative and Procedure Performance Process Flow

Test Case 141 involves transactions for the patient Charles Black and tests the Administrative Procedure Performance Process Flow (see IHE TF Vol I, section 3.3.1). The table below gives the overview of the test case. The steps in this case are the same as in case 131. The difference is that this test case uses a patient with Japanese characters.

Identifier	Description	Source	Destination
141.102.a04.adt	A04: Register patient as outpatient (Patient Class = 'E')	ADT	Ord Plc, Ord Fil
141.104.o01.orm	ORM: Order P1 for patient	Ord Plc	OF
141.106.o01.orm	ORM: Schedule X1	Ord Fil	Im Mgr
141.108.dcm	MWL C-Find	Modality	OF
141.110.dcm	PPS: Begin procedure(X1)	Modality	PPS Mgr
141.112.dcm	PPS: Begin procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
141.114.dcm	PPS: End procedure (X1)	Modality	PPS Mgr
141.116.dcm	PPS: End procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
	C-Find: Images available query	Modality	Img Mgr
141.118.dcm	C-Store (Images)	Modality	Img Mgr
141.120.dcm	C-Find: Images available query	Ord Fil	Img Mgr
141.122.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
141.124.dcm	Storage Commitment (N-Event Report)	Img Mgr	Modality

## 2.17 Test Case 142: Order Change Flow Initiated by Order Filler

This case will test order cancellation and re-ordering at the Order Filler (see IHE TF Vol I, section 3.3.3). The table below gives the overview of the test case.

Test 142 uses the same transactions as test 132. Test 142 differs in the usage of a patient with Japanese characters in the patient name.

Identifier	Description	Source	Destination
142.102.a01.adt	A01: Admit PATIENT	ADT	Ord Plc
142.103.a01.adt	A01: Admit PATIENT	ADT	Ord Fil
142.104.o01.orm	ORM: Order P22	Ord Plc	Ord Fil
142.106.o01.orm	ORM: Schedule X22	Ord Fil	Img Mgr

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142.108.dcm	MWL C-Find	Modality	Ord Fil
142.110.o01.orm	ORM: Cancel X22	Ord Fil	Ord Plc
142.112.o01.orm	ORM: Status Update (Cancel X22)	Ord Fil	Img Mgr
142.114.dcm	MWL C-Find	Modality	Ord Fil
142.116.o01.orm	ORM: Order P1	Ord Fil	Ord Plc
142.118.o02.orm	ORR: Placer Order Number	Ord Plc	Ord Fil
142.119.o01.orm	Extra order required for MESA tools		
142.120.o01.orm	ORM: Schedule X1	Ord Fil	Img Mgr
142.122.dcm	MWL C-Find	Modality	Ord Fil
142.124.dcm	PPS: Begin procedure(X1)	Modality	PPS Mgr
142.126.dcm	PPS: Begin procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
142.128.dcm	PPS: End procedure (X1)	Modality	PPS Mgr
142.130.dcm	PPS: End procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
142.132.dcm	C-Find: Images available query	Modality	Img Mgr
142.134.dcm	C-Store (Images)	Modality	Img Mgr
142.136.dcm	C-Find: Images available query	Ord Fil	Img Mgr
142.138.dcm	Storage Commitment (N-Action)	Modality	Img Mgr
142.140.dcm	Storage Commitment (N-Event Report)	Img Mgr	Modality
142.142.a03.adt	A03: Discharge PATIENT	ADT	Ord Plc
142.143.a03.adt	A03: Discharge PATIENT	ADT	Ord Fil

## 2.18 Test Case 151: Appointment Notification – New Bookings

This case will appointment notifications generated by the Order Filler and sent to the Order Placer (see IHE TF Vol I, section 3.3.6). The table below gives the overview of the test case. Test 151 is for the case of a new booking.

Identifier	Description	Source	Destination
151.102.a04.adt	A04: Register PATIENT	ADT	Ord Plc
151.103.a04.adt	A04: Register Patient	ADT	Ord Fil
151.104.o01.orm	ORM: Order P1	Ord Plc	Ord Fil
151.106.s12	SIU: Appointment notification	Order Filler	Order Placer

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## 2.19 Test Case 152: Appointment Notification – Reschedule Bookings

This case will appointment notifications generated by the Order Filler and sent to the Order Placer (see IHE TF Vol I, section 3.3.6. The table below gives the overview of the test case). Test 152 is for the case of a rescheduled booking.

The nominal patient name is MAGENTA^ROB.

Identifier	Description	Source	Destination
151.102.a04.adt	A04: Register MAGENTA	ADT	Ord Plc
151.103.a04.adt	A04: Register Patient	ADT	Ord Fil
151.104.o01.orm	ORM: Order P1	Ord Plc	Ord Fil
151.106.s12	SIU: Appointment notification	Order Filler	Order Placer
151.108.orm	ORM: Scheduling message to Image Mgr	Order Filler	Img Mgr
151.110.s13	SIU: Rescheduling booking	Order Filler	Order Placer

## 2.20 Test Case 153: Appointment Notification – Cancel Bookings

This case will appointment notifications generated by the Order Filler and sent to the Order Placer (see IHE TF Vol I, section 3.3.6. The table below gives the overview of the test case). Test 152 is for the case of a cancelled booking.

## 2.21 Test Case 283: DICOM Composite Object Evaluation – DVT

The purpose of test 283 is to evaluate DICOM Composite Objects produced by Acquisition Modalities, Evidence Creators, Report Creators or other actors that create DICOM Composite Objects. These objects are evaluated for conformance to the DICOM standard and not necessarily in the context of other IHE requirements. Creators of Composite Objects will use a documented script to run the evaluation and generate results. The underlying evaluation tool is the Agfa/Philips DVT.

## 2.22 Test Case 284: DICOM Composite Object Evaluation – DICOM3TOOLS

This is the same test as 283 with the exception that we use the Dave Clunie DICOM3TOOLS for evaluation. Users are asked to evaluate with both tools as they may uncover different problems.

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## 2.23 Test Case 1301: Account Management: New Account

Test Case 1301 involves transactions for the patient Montgomery Alabama. A new account is created for this patient. See IHE TF, Vol 3. Section 4.36.4.1.

Identifier	Description	Source	Destination
1301.102.p01.bar	P01: Account Management: New Account	ADT	Charge Processor
1301.104.p01.bar	P01: Account Management: New Account	ADT	Ord Fil

## 2.24 Test Case 1302: Account Managerment: Update Account

Test Case 1302 covers account management and the P05 message used to update a patient account. See IHE TF Vol 3, section 4.36.4.2.

The nominal patient name is ALASKA^JUNEAU.

Identifier	Description	Source	Destination
1302.102.p01.bar	P01: Account Management: New Account	ADT	Charge Processor
1302.104.p01.bar	P01: Account Management: New Account	ADT	Ord Fil
1302.106.a01.adt	Admit ALASKA	ADT	Order Placer
1302.108.a01.adt	Admit ALASKA	ADT	Order Filler
1302.110.p05.bar	P05: Account Management: Update Account	ADT	Charge Processor
1302.112.p05.bar	P05: Account Management: Update Account	ADT	Order Filler

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## 2.25 Test Case 1303: Account Management: End Account

Test Case 1302 covers account management and the P06 message used to end a patient account. See IHE TF Vol 3, section 4.36.4.3.

The nominal patient name is ARIZONA^PHOENIX.

Identifier	Description	Source	Destination
1303.102.p01.bar	P01: Account Management: New Account	ADT	Charge Processor
1303.104.p01.bar	P01: Account Management: New Account	ADT	Ord Fil
1303.106.a01.adt	Admit ALASKA	ADT	Order Placer
1303.108.a01.adt	Admit ALASKA	ADT	Order Filler
1303.110.p06.bar	P06: Account Management: End Account	ADT	Charge Processor
1303.112.p06.bar	P06: Account Management: End Account	ADT	Order Filler

## 2.26 Test Case 1305: Charge Posting Process Flow #1

Test Case 1305 involves all of the actors and transactions for a fully integrated Charge Processing Process Flow. See IHE TF Vol I, section 11.3.

The nominal patient name is CALIFORNIA^SACRAMENTO.

Identifier	Description	Source	Destination
1305.102.p01.bar	P01: Account Management: New Account	ADT	Charge Processor
1305.104.p01.bar	P01: Account Management: New Account	ADT	Ord Fil
1305.106.a01.adt	A01: Admit CALIFORNIA (inpatient)	ADT	Ord Plc
1305.108.a01.adt	A01: Admit CALIFORNIA (inpatient)	ADT	Ord Fil
1305.110.o01.orm	ORM: Order P1 for CALIFORNIA	Ord Plc	Ord Fil
1305.112.o01.orm	ORM: Schedule X1	Ord Fil	Im Mgr
1305.114.dcm	MWL C-Find	Modality	OF
1305.116.dcm	PPS: Begin procedure(X1)	Modality	PPS Mgr
1305.118.dcm	PPS: Begin procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
1305.120.dcm	C-Store (images)	Mod	Img Mgr
1305.122.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1305.124.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
1305.126.p03.dft	P03: Technical Charges	Ord Fil	Charge P
1305.128.p03.dft	P03: Professional Charges	Ord Fil	Charge P

---

## 2.27 Test Case 1306: Charge Posting Process Flow #2

Test Case 1302 involves transactions for the patient Juneau Alaska. One procedure (P1) is ordered, scheduled and executed. A second performed procedure step (X2) is added at the modality and should be billed (for both technical and professional charges).

Identifier	Description	Source	Destination
1302.102.	Account Management	ADT	Charge P
1302.104	Account Management	ADT	Ord Fil
1302.106.a01.adt	A01: Admit ALASKA (inpatient)	ADT	Ord Plc
1302.108.o01.orm	ORM: Order P1 for ALASKA	Ord Plc	Ord Fil
1302.110.o01.orm	ORM: Schedule X1	Ord Fil	Im Mgr
1302.112.dcm	MWL C-Find	Modality	OF
1302.114.dcm	PPS: Begin procedure(X1)	Modality	PPS Mgr
1302.116.dcm	PPS: Begin procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
1302.118.dcm	C-Store (images)	Mod	Img Mgr
1302.120.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1302.122.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
1302.126.dcm	PPS: Begin procedure (X2)	Modality	PPS Mgr
1302.128.dcm	PPS: Begin procedure (X2)	PPS Mgr	Img Mgr or Ord Fil
1302.130.dcm	C-Store (images)	Mod	Img Mgr
1302.132.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1302.134.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
1302.136.	XXX: Technical Charges	Ord Fil	Charge P
1302.138.	XXX: Technical Charges	Ord Fil	Charge P
1302.140	XXX: Professional Charges	Ord Fil	Charge P
1302.142.	XXX: Professional Charges	Ord Fil	Charge P

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## 2.28 Test Case 1307: Charge Posting Process Flow #3

Test Case 1303 involves transactions for the patient Phoenix Arizona. One procedure (P1) is ordered and scheduled. A different performed procedure step (X2) is performed at the modality.

Identifier	Description	Source	Destination
1303.102.	Account Management	ADT	Charge P
1303.104	Account Management	ADT	Ord Fil
1303.106.a04.adt	A04: Register ARIZONA (outpatient, class = 'O')	ADT	Ord Plc
1303.108.o01.orm	ORM: Order P1 for ARIZONA	Ord Plc	Ord Fil
1303.110.o01.orm	ORM: Schedule X1	Ord Fil	Im Mgr
1303.112.dcm	MWL C-Find	Modality	OF
1303.114.dcm	PPS: Begin procedure (X2)	Modality	PPS Mgr
1303.116.dcm	PPS: Begin procedure (X2)	PPS Mgr	Img Mgr or Ord Fil
1303.118.dcm	C-Store (images)	Mod	Img Mgr
1303.120.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1303.122.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
1303.124.	XXX: Technical Charges	Ord Fil	Charge P
1303.126	XXX: Professional Charges	Ord Fil	Charge P

---

## 2.29 Test Case 1308: Charge Posting #4

Test Case 1304 involves transactions for the patient Littlerock Arkansas. The patient has one account that is opened and then closed. A second account is then opened and used for the current charges.

Identifier	Description	Source	Destination
1304.102.	Account Management	ADT	Charge P
1304.104	Account Management	ADT	Ord Fil
1304.106	Account Management	ADT	Charge P
1304.108	Account Management	ADT	Ord Fil
1304.110	Account Management	ADT	Charge P
1304.112	Account Management	ADT	Ord Fil
1304.114.a01.adt	A01: Admit ARKANSAS	ADT	Ord Plc
1304.116.o01.orm	ORM: Order P1 for ARKANSAS	Ord Plc	Ord Fil
1304.118.o01.orm	ORM: Schedule X1	Ord Fil	Im Mgr
1304.120.dcm	MWL C-Find	Modality	OF
1304.122.dcm	PPS: Begin procedure (X1)	Modality	PPS Mgr
1304.124.dcm	PPS: Begin procedure (X1)	PPS Mgr	Img Mgr or Ord Fil
1304.126.dcm	C-Store (images)	Mod	Img Mgr
1304.128.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1304.130.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
1304.132	XXX: Technical Charges	Ord Fil	Charge P
1304.134	XXX: Professional Charges	Ord Fil	Charge P

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## 2.30 Test Case 1411: PWF Mammography

Test Case 1411 involves transactions for the patient Hartford Connecticut. The patient has one requested procedure for a Mammography Screening. This procedure is ordered, scheduled and executed. A separate worklist entry for Computer Aided Detection is generated. The Post Processing system produces a DICOM SR object to fulfill this request.

Identifier	Description	Source	Destination
1411.102.a04.adt	A04: Register CONNECTICUT as outpatient (patient class = 'O')	ADT	Ord Plc
1411.104.a04.adt	A04: Register CONNECTICUT as outpatient (patient class = 'O')	ADT	Ord Fil
1411.106.o01.orm	ORM: Order P101 for CONNECTICUT	Ord Plc	Ord Fil
1411.108.o01.orm	ORM: Schedule X101	Ord Fil	Im Mgr
1411.110.dcm	MWL C-Find	Modality	OF
1411.112.dcm	PPS: Begin procedure (X101)	Modality	PPS Mgr
1411.114.dcm	PPS: Begin procedure (X101)	PPS Mgr	Img Mgr or Ord Fil
1411.116.dcm	C-Store (images)	Mod	Img Mgr
1411.118.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1411.120.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
	Schedule Mammography CAD	PPM	
1411.122.dcm	GPWL C-Find	Img Crt	PPM
1411.124.dcm	N-Action: Claim Workitem	Img Crt	PPM
1411.126.dcm	PPS: Performed Work Status Update	PPM	PPM (observing)
1411.128.dcm	PPS: Workitem PPS in progress	Img Crt	PPM
1411.130.dcm	PPS: Workitem PPS complete	Img Crt	PPM
1411.132..dcm	N-Action: Workitem Completed	Img Crt	PPM
1411.134.dcm	PPS: Performed Work Status Update	PPM	PPM (observing)
1411.136.dcm	C-Store (Evidence documents)	Img Crt	Img Mgr
1411.138.dcm	Storage Commitment (N-Action)	Img Crt	Img Mgr
1411.140.dcm	Storage Commitment (N-Event)	Img Mgr	Img Crt

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## 2.31 Test Case 1412: PWF CT

Test Case 1412 involves transactions for the patient Dover Delaware. The patient has one requested procedure for a Generic CT exam (P102). This procedure is ordered, scheduled and executed. A separate worklist entry for 3D reconstruction is generated. The Post Processing system produces a 3D volume image to fulfill this request.

Identifier	Description	Source	Destination
1412.102.a04.adt	A04: Register DELAWARE as outpatient (patient class = 'O')	ADT	Ord Plc
1412.104.a04.adt	A04: Register DELAWARE as outpatient (patient class = 'O')	ADT	Ord Fil
1412.106.o01.orm	ORM: Order P102 for DELAWARE	Ord Plc	Ord Fil
1412.108.o01.orm	ORM: Schedule X102	Ord Fil	Im Mgr
1412.110.dcm	MWL C-Find	Modality	OF
1412.112.dcm	PPS: Begin procedure (X102)	Modality	PPS Mgr
1412.114.dcm	PPS: Begin procedure (X102)	PPS Mgr	Img Mgr or Ord Fil
1412.116.dcm	C-Store (images)	Mod	Img Mgr
1412.118.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1412.120.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
	Schedule Mammography CAD	PPM	
1412.122.dcm	GPWL C-Find	Img Crt	PPM
1412.124.dcm	N-Action: Claim Workitem	Img Crt	PPM
1412.126.dcm	PPS: Performed Work Status Update	PPM	PPM
1412.128.dcm	PPS: Workitem PPS in progress	Img Crt	PPM
1412.130.dcm	PPS: Workitem PPS complete	Img Crt	PPM
1412.132..dcm	N-Action: Workitem Completed	Img Crt	PPM
1412.134.dcm	PPS: Performed Work Status Update	PPM	PPM
1412.136.dcm	C-Store (Evidence documents)	Img Crt	Img Mgr
1412.138.dcm	Storage Commitment (N-Action)	Img Crt	Img Mgr
1412.140.dcm	Storage Commitment (N-Event)	Img Mgr	Img Crt

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## 2.32 Test Case 1413: PWF MR

Test Case 1413 involves transactions for the patient Tallahassee Florida. The patient has one requested procedure for a Generic MR exam (P103). This procedure is ordered, scheduled and executed. A separate worklist entry for 3D reconstruction is generated. The Post Processing system produces a 3D volume image to fulfill this request.

Identifier	Description	Source	Destination
1413.102.a04.adt	A04: Register FLORIDA as outpatient (patient class = 'O')	ADT	Ord Plc
1413.104.a04.adt	A04: Register FLORIDA as outpatient (patient class = 'O')	ADT	Ord Fil
1413.106.o01.orm	ORM: Order P103 for FLORIDA	Ord Plc	Ord Fil
1413.108.o01.orm	ORM: Schedule X103	Ord Fil	Im Mgr
1413.110.dcm	MWL C-Find	Modality	OF
1413.112.dcm	PPS: Begin procedure (X103)	Modality	PPS Mgr
1413.114.dcm	PPS: Begin procedure (X103)	PPS Mgr	Img Mgr or Ord Fil
1413.116.dcm	C-Store (images)	Mod	Img Mgr
1413.118.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1413.120.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
	Schedule Mammography CAD	PPM	
1413.122.dcm	GPWL C-Find	Img Crt	PPM
1413.124.dcm	N-Action: Claim Workitem	Img Crt	PPM
1413.126.dcm	PPS: Performed Work Status Update	PPM	PPM
1413.128.dcm	PPS: Workitem PPS in progress	Img Crt	PPM
1413.130.dcm	PPS: Workitem PPS complete	Img Crt	PPM
1413.132..dcm	N-Action: Workitem Completed	Img Crt	PPM
1413.134.dcm	PPS: Performed Work Status Update	PPM	PPM
1413.136.dcm	C-Store (Evidence documents)	Img Crt	Img Mgr
1413.138.dcm	Storage Commitment (N-Action)	Img Crt	Img Mgr
1413.140.dcm	Storage Commitment (N-Event)	Img Mgr	Img Crt

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### 2.33 Test Case 1601: Interpretation Worklist

Test 1601 covers the Interpretation task in the Reporting Workflow integration profile (see IHE TF, Vol I: section 13.3). This test only covers the interpretation step and does not include creation of any other items (such as transcriptions or reports).

Identifier	Description	Source	Destination
1601.102.a04.adt	A04: Register WASHINGTON as outpatient (patient class = 'E')	ADT	Ord Plc
1601.103.a04.adt	A04: Register WASHINGTON as outpatient (patient class = 'E')	ADT	Ord Fil
1601.104.a04.adt	A04: Register WASHINGTON as outpatient (patient class = 'E')	ADT	Rpt Mgr
1601.106.o01.orm	ORM: Order P1 for WASHINGTON	Ord Plc	Ord Fil
1601.108.o01.orm	ORM: Schedule X1	Ord Fil	Im Mgr
1601.109.o01.orm	ORM: Schedule X1	Ord Fil	Rpt Mgr
1601.110.dcm	MWL C-Find	Modality	OF
1601.112.dcm	PPS: Begin procedure (X1)	Modality	PPS Mgr
1601.113.dcm	PPS: Begin procedure (X1)	PPS Mgr	Rpt Mgr
1601.114.dcm	PPS: Complete procedure (X1)	Modality	PPS Mgr
1601.115.dcm	PPS: Complete procedure (X1)	PPS Mgr	Rpt Mgr
1601.116.dcm	C-Store (images)	Mod	Img Mgr
1601.118.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1601.120.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
1601.124.dcm	Images Available	Rpt Mgr	Img Mgr
	Create Interpretation Worklist Task	Rpt Mgr	
1601.126.dcm	Reporting Worklist Provided (Interp)	Rpt Crt	Rpt Mgr
1601.128.dcm	N-Action: Claim Workitem	Rpt Crt	Rpt Mgr
1601.130.dcm	GPPS: Workitem PPS in progress (Interp)	Rpt Crt	Rpt Mgr
1601.132.dcm	GPPS: Performed Work Status Update	Rpt Mgr	IM and/or OF
1601.134.dcm	Query/Retrieve Images	Rpt Crt	Img Mgr
1601.136.dcm	GPPS: Workitem PPS complete (Interp)	Rpt Crt	Rpt Mgr
1601.138.dcm	GPPS: Performed Work Status Update	Rpt Mgr	IM and/or OF

### 2.34 Test Case 1602: RWF Predefined Report

Test Case 1602 corresponds to Reporting Workflow use case 1: Predefined Report, as defined in the Technical Framework. It involves transactions for the patient George Washington. The patient has one requested procedure for a Generic MR exam (P103). This procedure is ordered,

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scheduled and executed. An interpretation workitem is created. A report will be generated and verified. At the end of this case, the workitem is set to completed, the workitem is removed from the worklist, a report is generated, the output results reference the generated report, the generated report is verified, and the performed workitem code sequence includes interpretation, transcription and verification.

Identifier	Description	Source	Destination
1601.102.a04.adt	A04: Register WASHINGTON as outpatient (patient class = 'E')	ADT	Ord Plc
1601.103.a04.adt	A04: Register WASHINGTON as outpatient (patient class = 'E')	ADT	Ord Fil
1601.104.a04.adt	A04: Register WASHINGTON as outpatient (patient class = 'E')	ADT	Rpt Mgr
1601.106.o01.orm	ORM: Order P1 for WASHINGTON	Ord Plc	Ord Fil
1601.108.o01.orm	ORM: Schedule X1	Ord Fil	Im Mgr
1601.109.o01.orm	ORM: Schedule X1	Ord Fil	Rpt Mgr
1601.110.dcm	MWL C-Find	Modality	OF
1601.112.dcm	PPS: Begin procedure (X1)	Modality	PPS Mgr
1601.113.dcm	PPS: Begin procedure (X1)	PPS Mgr	Rpt Mgr
1601.114.dcm	PPS: Complete procedure (X1)	Modality	PPS Mgr
1601.115.dcm	PPS: Complete procedure (X1)	PPS Mgr	Rpt Mgr
1601.116.dcm	C-Store (images)	Mod	Img Mgr
1601.118.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1601.120.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
1601.122.dcm	MPPS Completed (?)	PPS Mgr	Rpt Mgr
1601.124.dcm	Images Available (optional?)	Rpt Mgr	Img Mgr
	Create Interpretation Worklist Task	Rpt Mgr	
1601.126.dcm	Reporting Worklist Provided (Interp)	Rpt Crt	Rpt Mgr
1601.128.dcm	N-Action: Claim Workitem	Rpt Crt	Rpt Mgr
1601.130.dcm	PPS: Workitem PPS in progress (Interp)	Rpt Crt	Rpt Mgr
1601.132.dcm	PPS: Performed Work Status Update (?)	Rpt Mgr	IM and/or OF
1601.134.dcm	Query/Retrieve Images	Rpt Crt	Img Mgr
1601.136.dcm	PPS: Workitem PPS complete (Interp)	Rpt Crt	Rpt Mgr
1601.138.dcm	PPS: Performed Work Status Update (?)	Rpt Mgr	IM and/or OF
1601.140.dcm	PPS: Workitem PPS in progress (Trans)	Rpt Crt	Rpt Mgr
1601.142.dcm	PPS: Performed Work Status Update (?)	Rpt Mgr	IM and/or OF
1601.144.dcm	PPS: Workitem PPS complete (Trans)	Rpt Crt	Rpt Mgr
1601.146.dcm	PPS: Performed Work Status Update (?)	Rpt Mgr	IM and/or OF
1601.148.dcm	PPS: Workitem PPS in progress (Verify)	Rpt Crt	Rpt Mgr
1601.150.dcm	PPS: Performed Work Status Update (?)	Rpt Mgr	IM and/or OF

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1601.152.dcm	Report Submission	Rpt Crt	Rpt Mgr
1601.154.dcm	PPS: Workitem PPS complete (Verify)	Rpt Crt	Rpt Mgr
1601.156.dcm	PPS: Performed Work Status Update (?)	Rpt Mgr	IM and/or OF
1601.158.dcm	Report Issuing	Rpt Mgr	Rpt Rep
1601.160.dcm	N-Action: Release Workitem	Rpt Crt	Rpt Mgr
1601.162.dcm	Reporting Worklist Provided (Interp)	Rpt Crt	Rpt Mgr

## 2.35 Test Case 1603: RWF Use Case 2: Workitem Deferred

Test 1603 covers the Interpretation task in the Reporting Workflow integration profile (see IHE TF, Vol I: section 13.4.2). In this test, the Report Creator claims a workitem and then defers it by setting the status back to “SCHEDULED”.

Identifier	Description	Source	Destination
1603.102.a04.adt	A04: Register LINCOLN as outpatient (patient class = 'E')	ADT	Ord Plc
1603.104.a04.adt	A04: Register LINCOLN as outpatient (patient class = 'E')	ADT	Ord Fil
1603.108.o01.orm	ORM: Order P1 for LINCOLN	Ord Plc	Ord Fil
1603.110.o01.orm	ORM: Schedule X1	Ord Fil	Im Mgr
1603.112.o01.orm	ORM: Schedule X1	Ord Fil	Rpt Mgr
1603.110.dcm	MWL C-Find	Modality	OF
1603.112.dcm	PPS: Begin procedure (X1)	Modality	PPS Mgr
1603.114.dcm	PPS: Begin procedure (X1)	PPS Mgr	Rpt Mgr
1603.116.dcm	PPS: Complete procedure (X1)	Modality	PPS Mgr
1603.118.dcm	PPS: Complete procedure (X1)	PPS Mgr	Rpt Mgr
1603.120.dcm	C-Store (images)	Mod	Img Mgr
1603.122.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
1603.124.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
1603.126.dcm	Images Available	Rpt Mgr	Img Mgr
	Create Interpretation Worklist Task	Rpt Mgr	
1603.128.dcm	Reporting Worklist Provided (Interp)	Rpt Crt	Rpt Mgr
1603.130.dcm	N-Action: Claim Workitem	Rpt Crt	Rpt Mgr
1603.132.dcm	Reporting Worklist Provided (Interp)	Rpt Crt	Rpt Mgr
1603.134.dcm	N-Action: Defer Workitem (set status to SCHEDULED)	Rpt Crt	Rpt Mgr
1603.136.dcm	Reporting Worklist Provided (Interp)	Rpt Crt	Rpt Mgr

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## 2.36 Test Case 2001: NM Time Separated Acquisition

Test Case 2001 simulates time separated acquisition (Rad TF-1: E.2.2). A study has two separate scheduled (and performed) procedure steps. These steps are separated by some amount of time. In this test, the separation is accomplished by having the modality perform an acquisition for a different patient after the first step is performed for the first patient.

All acquisitions are scheduled for and performed by the same modality. The Storage Commitment transactions are omitted from the test for brevity. Systems may still perform these transactions; they are not evaluated.

Identifier	Description	Source	Destination
2001.102.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2001.104.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2001.106.o01.orm	ORM: Order PNM1 for XX	Ord Plc	OF
2001.108.o01.orm	ORM: Schedule XNM1 (two SPS, XNM1A and XNM1B)	Ord Fil	Im Mgr
2001.112.a04.adt	A04: Register YY as outpatient (Patient Class = 'O')	ADT	Ord Plc
2001.114.a04.adt	A04: Register YY as outpatient (Patient Class = 'O')	ADT	Ord Plc
2001.116.o01.orm	ORM: Order PNM2 for YY	Ord Plc	OF
2001.118.o01.orm	ORM: Schedule XNM2 (one SPS, XNM2)	Ord Fil	Im Mgr
2001.120.dcm	MWL C-Find	Modality	OF
2001.122.dcm	PPS: Begin procedure (XNM1A)	Modality	PPS Mgr
2001.124.dcm	PPS: Begin procedure (XNM1A)	PPS Mgr	Img Mgr or Ord Fil
2001.126.dcm	PPS: End procedure (XNM1A)	Modality	PPS Mgr
2001.128.dcm	PPS: End procedure (XNM1A)	PPS Mgr	Img Mgr or Ord Fil
2001.130.dcm	C-Store (Images)	Modality	Img Mgr
	Switch modality for patient YY		
2001.132.dcm	PPS: Begin procedure (XNM2)	Modality	PPS Mgr
2001.134.dcm	PPS: Begin procedure (XNM2)	PPS Mgr	Img Mgr or Ord Fil
2001.136.dcm	PPS: End procedure (XNM2)	Modality	PPS Mgr
2001.138.dcm	PPS: End procedure (XNM2)	PPS Mgr	Img Mgr or Ord Fil
2001.140.dcm	C-Store (Images)	Modality	Img Mgr
	Return to patient XX		

2001.150.dcm	MWL C-Find	Modality	OF
2001.152.dcm	PPS: Begin procedure (XNM1B)	Modality	PPS Mgr
2001.154.dcm	PPS: Begin procedure (XNM1B)	PPS Mgr	Img Mgr or Ord Fil
2001.156.dcm	PPS: End procedure (XNM1B)	Modality	PPS Mgr
2001.158.dcm	PPS: End procedure (XNM1B)	PPS Mgr	Img Mgr or Ord Fil
2001.160.dcm	C-Store (Images)	Modality	Img Mgr

## 2.37 Test Case 2002: NM Separate Reconstruction Step

Test Case 2002 simulates reconstruction as a separate step performed by the modality (Rad TF-1: E.2.3). A study has one scheduled procedure step. The modality performs data acquisition and produces raw projection data. This will result in an MPPS message for that data. The modality performs reconstruction as a separate step, produces the reconstructed images and a separate MPPS message. This MPPS message is the MPPS Append Case.

The Storage Commitment transactions are omitted from the test for brevity. Systems may still perform these transactions; they are not evaluated.

Identifier	Description	Source	Destination
2002.102.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2002.104.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2002.106.o01.orm	ORM: Order PNM2 for XX	Ord Plc	OF
2002.108.o01.orm	ORM: Schedule XNM2 (SPS, XNM2)	Ord Fil	Im Mgr
2002.110.dcm	MWL C-Find	Modality	OF
2002.112.dcm	PPS: Begin procedure (XNM2)	Modality	PPS Mgr
2002.114.dcm	PPS: Begin procedure (XNM2)	PPS Mgr	Img Mgr or Ord Fil
2002.116.dcm	PPS: End procedure (XNM2)	Modality	PPS Mgr
2002.118.dcm	PPS: End procedure (XNM2)	PPS Mgr	Img Mgr or Ord Fil
2002.120.dcm	C-Store (Images)	Modality	Img Mgr
	Now, perform the reconstruction as the append case		
2002.122.dcm	PPS: Begin procedure (XNM2)	Modality	PPS Mgr
2002.124.dcm	PPS: Begin procedure (XNM2)	PPS Mgr	Img Mgr or Ord Fil
2002.126.dcm	PPS: End procedure (XNM2)	Modality	PPS Mgr

2002.128.dcm	PPS: End procedure (XNM2)	PPS Mgr	Img Mgr or Ord Fil
2002.130.dcm	C-Store (Images)	Modality	Img Mgr

### 2.38 Test Case 2003: NM Clinical Post Processing

Test Case 2003 simulates clinical post processing as a separate step performed through the post processing workflow (Rad TF-1: E.2.5). A study has one scheduled procedure step. The modality performs data acquisition and produces image data. This will result in an MPPS message for that data. A separate post processing worklist is generated to control the clinical post processing step

The Storage Commitment transactions are omitted from the test for brevity. Systems may still perform these transactions; they are not evaluated.

Identifier	Description	Source	Destination
2003.102.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2003.104.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc

### 2.39 Test Case 2004: NM Scheduled Injection

In test 2004, injection of a radiopharmaceutical appears as one SPS in the Modality Worklist (Rad TF-1: E.3.1). A separate SPS is included for the imaging step. The injection step is performed at the modality and the modality sends an MPPS message indicating the injection is complete (but with no images). The second SPS is claimed and performed by the modality (producing images).

The Storage Commitment transactions are omitted from the test for brevity. Systems may still perform these transactions; they are not evaluated.

Identifier	Description	Source	Destination
2004.102.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2004.104.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2004.106.o01.orm	ORM: Order PNM3 for XX	Ord Plc	OF
2004.108.o01.orm	ORM: Schedule XNM3 (two SPS, XNM3A, XNM3B)	Ord Fil	Im Mgr
2004.110.dcm	MWL C-Find	Modality	OF
	First PPS is to indicate the injection is complete, but no images are produced.		

2004.112.dcm	PPS: Begin procedure (XNM3A)	Modality	PPS Mgr
2004.114.dcm	PPS: Begin procedure (XNM3A)	PPS Mgr	Img Mgr or Ord Fil
2004.116.dcm	PPS: End procedure (XNM3A)	Modality	PPS Mgr
2004.118.dcm	PPS: End procedure (XNM3A)	PPS Mgr	Img Mgr or Ord Fil
	Second PPS is to indicate images produced		
2004.120.dcm	PPS: Begin procedure (XNM3B)	Modality	PPS Mgr
2004.122.dcm	PPS: Begin procedure (XNM3B)	PPS Mgr	Img Mgr or Ord Fil
2004.124.dcm	PPS: End procedure (XNM3B)	Modality	PPS Mgr
2004.126.dcm	PPS: End procedure (XNM3B)	PPS Mgr	Img Mgr or Ord Fil
2004.128.dcm	C-Store (Images)	Modality	Img Mgr

## 2.40 Test Case 2005: NM Scheduled Injection/Imaging in One SPS

In test 2005, injection of a radiopharmaceutical and an imaging procedure appear as separate code items (Protocol Code Sequence) in one SPS in the Modality Worklist (Rad TF-1: E.3.1). The injection is performed at the modality, a single PPS occurs and two protocol code items (injection, imaging) are included in the performed protocol code sequence.

The Storage Commitment transactions are omitted from the test for brevity. Systems may still perform these transactions; they are not evaluated.

Identifier	Description	Source	Destination
2005.102.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2005.104.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2005.106.o01.orm	ORM: Order PNM4 for XX	Ord Plc	OF
2005.108.o01.orm	ORM: Schedule XNM4 (oneSPS, two protocol code items)	Ord Fil	Im Mgr
2005.110.dcm	MWL C-Find	Modality	OF
	One PPS is generated that includes two protocol code items		
2005.112.dcm	PPS: Begin procedure (XNM4)	Modality	PPS Mgr
2005.114.dcm	PPS: Begin procedure (XNM4)	PPS Mgr	Img Mgr or Ord Fil
2005.116.dcm	PPS: End procedure (XNM4)	Modality	PPS Mgr
2005.118.dcm	PPS: End procedure (XNM4)	PPS Mgr	Img Mgr or Ord Fil

2005.120.dcm	C-Store (Images)	Modality	Img Mgr
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## 2.41 Test Case 2006: NM Injection Performed/Imaging Cancelled

In test 2006, injection of a radiopharmaceutical appears as one SPS in the Modality Worklist (Rad TF-1: E.3.1). A separate SPS is included for the imaging step. The injection step is performed at the modality and the modality sends an MPPS message indicating the injection is complete (but with no images). The second SPS is cancelled by the modality with no images produced..

The Storage Commitment transactions are omitted from the test for brevity. Systems may still perform these transactions; they are not evaluated.

Identifier	Description	Source	Destination
2006.102.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2006.104.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2006.106.o01.orm	ORM: Order PNM3 for XX	Ord Plc	OF
2006.108.o01.orm	ORM: Schedule XNM3 (two SPS, XNM3A, XNM3B)	Ord Fil	Im Mgr
2006.110.dcm	MWL C-Find	Modality	OF
	First PPS is to indicate the injection is complete, but no images are produced.		
2006.112.dcm	PPS: Begin procedure (XNM3A)	Modality	PPS Mgr
2006.114.dcm	PPS: Begin procedure (XNM3A)	PPS Mgr	Img Mgr or Ord Fil
2006.116.dcm	PPS: End procedure (XNM3A)	Modality	PPS Mgr
2006.118.dcm	PPS: End procedure (XNM3A)	PPS Mgr	Img Mgr or Ord Fil
	Second PPS is to indicate step is cancelled		
2006.120.dcm	PPS: Begin procedure (XNM3B)	Modality	PPS Mgr
2006.122.dcm	PPS: Begin procedure (XNM3B)	PPS Mgr	Img Mgr or Ord Fil
2006.124.dcm	PPS: End procedure (XNM3B) -Cancelled	Modality	PPS Mgr
2006.126.dcm	PPS: End procedure (XNM3B) - Cancelled	PPS Mgr	Img Mgr or Ord Fil

## 2.42 Test Case 2007: NM Injection Performed/Imaging Cancelled in one SPS

In test 2007, injection of a radiopharmaceutical and an imaging procedure appear as separate code items (Protocol Code Sequence) in one SPS in the Modality Worklist (Rad TF-1: E.3.1). The injection is performed at the modality, but the imaging step is cancelled.

## 2.43 Test Case 2008: NM Injection Performed/Imaging Cancelled

In test 2008, one requested procedure is mapped to two separate SPS, each step scheduled for a different modality (Rad TF-1: E.3.1.2).

The Storage Commitment transactions are omitted from the test for brevity. Systems may still perform these transactions; they are not evaluated.

Identifier	Description	Source	Destination
2008.102.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2008.104.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2008.106.o01.orm	ORM: Order PNM5 for XX	Ord Plc	OF
2008.108.o01.orm	ORM: Schedule XNM5 (two SPS, XNM5A, XNM5B)	Ord Fil	Im Mgr
2008.110.dcm	MWL C-Find	Modality	OF

## 2.44 Test Case 2009: NM Injection with Immediate and Delayed Imaging

Test 2009 corresponds to the example given in Rad TF-1: E.3.2.3. Two SPS are placed on the worklist. The first SPS contains two protocol code items, one for the injection and one for initial dynamic and static imaging. The second SPS is for the second static acquisition. It is expected that the modality will create a separate series for the second SPS.

The Storage Commitment transactions are omitted from the test for brevity. Systems may still perform these transactions; they are not evaluated.

Identifier	Description	Source	Destination
2009.102.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2009.104.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2009.106.o01.orm	ORM: Order PNM6 for XX	Ord Plc	OF
2009.108.o01.orm	ORM: Schedule XNM6 (two SPS,	Ord Fil	Im Mgr

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	XNM6A, XNM6B)		
2009.110.dcm	MWL C-Find	Modality	OF
	One PPS is generated that includes two protocol code items (injection and images)		
2009.112.dcm	PPS: Begin procedure (XNM6A)	Modality	PPS Mgr
2009.114.dcm	PPS: Begin procedure (XNM6A)	PPS Mgr	Img Mgr or Ord Fil
2009.116.dcm	PPS: End procedure (XNM6A)	Modality	PPS Mgr
2009.118.dcm	PPS: End procedure (XNM6A)	PPS Mgr	Img Mgr or Ord Fil
2009.120.dcm	C-Store (Images)	Modality	Img Mgr
	Send MPPS will for images in a different series		
2009.122.dcm	PPS: Begin procedure (XNM6B)	Modality	PPS Mgr
2009.124.dcm	PPS: Begin procedure (XNM6B)	PPS Mgr	Img Mgr or Ord Fil
2009.126.dcm	PPS: End procedure (XNM6B)	Modality	PPS Mgr
2009.128.dcm	PPS: End procedure (XNM6B)	PPS Mgr	Img Mgr or Ord Fil
2009.130.dcm	C-Store (Images)	Modality	Img Mgr

## 2.45 Test Case 2010: NM Two Isotope Examination

Test 2010 corresponds to the example given in Rad TF-1: E.3.2.7 (myocardial perfusion study). Two SPS are scheduled, each with two protocol code items. Each SPS has a protocol code item for an injection one one protocol code item for imaging.

The Storage Commitment transactions are omitted from the test for brevity. Systems may still perform these transactions; they are not evaluated.

Identifier	Description	Source	Destination
2010.102.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2010.104.a04.adt	A04: Register XX as outpatient (Patient Class = 'O')	ADT	Ord Plc
2010.106.o01.orm	ORM: Order PNM7 for XX	Ord Plc	OF
2010.108.o01.orm	ORM: Schedule XNM7 (two SPS, XNM7A, XNM7B)	Ord Fil	Im Mgr
2010.110.dcm	MWL C-Find	Modality	OF
	One PPS is generated that includes two protocol code items (injection and images)		
2010.112.dcm	PPS: Begin procedure (XNM7A)	Modality	PPS Mgr

2010.114.dcm	PPS: Begin procedure (XNM7A)	PPS Mgr	Img Mgr or Ord Fil
2010.116.dcm	PPS: End procedure (XNM7A)	Modality	PPS Mgr
2010.118.dcm	PPS: End procedure (XNM7A)	PPS Mgr	Img Mgr or Ord Fil
2010.120.dcm	C-Store (Images)	Modality	Img Mgr
	Send MPPS will for images in a different series		
2010.122.dcm	PPS: Begin procedure (XNM7B)	Modality	PPS Mgr
2010.124.dcm	PPS: Begin procedure (XNM7B)	PPS Mgr	Img Mgr or Ord Fil
2010.126.dcm	PPS: End procedure (XNM7B)	Modality	PPS Mgr
2010.128.dcm	PPS: End procedure (XNM7B)	PPS Mgr	Img Mgr or Ord Fil
2010.130.dcm	C-Store (Images)	Modality	Img Mgr

#### **2.46 Test Case 2011: NM Re-orientation on Evidence Creator with Implicit Workflow**

Test 2011 corresponds to the example given in Rad TF-1: E.3.2.10.

#### **2.47 Test Case 2012: NM Re-orientation on Evidence Creator with Explicit Workflow**

Test 2012 corresponds to the example given in Rad TF-1: E.3.2.11.

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### **3 Secure Node Sequences**

The sequences in this section for are secure nodes. These nodes use TLS to negotiate secure connections and audit records to track activity. Some of these sequences are repeated from prior tests. We repeat those sequences and add the audit messages. We do not show the TLS negotiation as separate transactions; they are inherent in the messaging.

### 3.1 Test Case 1240: Basic Security, Registration

Test case 1240 exercises ADT registration messages (ADT^A04) in the context of Basic Security. No audit messages are included in this test.

Identifier	Description	Source	Destination
1240.102.a04.adt	A04: Register BROWN as outpatient	ADT	Ord Plc
1240.104.a04.adt	A04: Register BROWN as outpatient	ADT	Ord Fil

### 3.2 Test Case 1502: Pre-reg/Order Cancel/Reorder

Test case 1502 repeats the transactions defined for case 102. We add the audit record messages that would normally occur as a result of the operations in this case. We omit “startup” messages such as system startup and user authentication. In some instances, commercial products may send more or fewer audit messages than those listed in the table below. For example, the Patient-Record message can be for records that are Created, Modified or Accessed. The ADT system will probably send messages for both Accessed and Modified when a patient is registered, but it is possible they will also send a message for Created. That depends on the implementation of the ADT system.

Identifier	Description	Source	Destination
102.102.a05.adt	A05: Pre-register BROWN	ADT	Ord Plc, Ord Fil
1502.002	Patient-Record: Created	ADT	Audit Record Rep
1502.004	Patient-Record: Accessed	ADT	Audit Record Rep
1502.006	Patient-Record: Modified	ADT	Audit Record Rep
102.104.o01.orm	ORM: Order P1	Ord Plc	Ord Fil
1502.008	Patient-Record: Accessed	Ord Plc	Audit Record Rep
1502.010	Patient-Record: Modified	Ord Plc	Audit Record Rep
102.106.o01.orm	ORM: Schedule X1	Ord Fil	Img Mgr
1502.012	Patient-Record: Accessed	Ord Fil	Audit Record Rep
1502.014	Procedure-Record: Created	Ord Fil	Audit Record Rep
102.108.a01.adt	A01: Admit BROWN (inpatient)	ADT	Ord Plc, Ord Fil
1502.016	Patient-Record: Accessed	ADT	Audit Record Rep
1502.018	Patient-Record: Modified	ADT	Audit Record Rep
102.110.dcm	MWL C-Find	Modality	Ord Fil
1502.020	Modality Worklist Provided	Ord Fil	Audit Record Rep
x	Modality will perform X11 rather than X1		
102.112.dcm	PPS: Begin procedure (X11)	Modality	PPS Mgr
102.114.dcm	PPS: End procedure (X11)	Modality	PPS Mgr

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1502.022	Begin-storing-instances	Modality	Audit Record Rep
102.116.dcm	C-Store (Images)	Modality	Img Mgr
102.118.dcm	Storage Commitment N-Action	Modality	Img Mgr
102.120.dcm	Storage Commitment N-Event	Img Mgr	Modality
102.121.dcm	Image Display C-Find	Img Disp	Img Mgr
1502.024	DICOM-query	Img Mgr	Audit Record Rep
x	New sequence at Ord Fil/Ord Plc		
102.122.o01.orm	ORM: Order P21	Ord Plc	Ord Fil
1502.026	Patient-Record: Accessed	Ord Plc	Audit Record Rep
1502.028	Patient-Record: Modified	Ord Plc	Audit Record Rep
102.124.o01.orm	ORM: Schedule X21	Ord Fil	Img Mgr
1502.030	Patient-Record: Accessed	Ord Fil	Audit Record Rep
1502.032	Procedure-Record: Created	Ord Fil	Audit Record Rep
102.125.dcm	MWL C-Find	Modality	Ord Fil
1502.034	Modality Worklist Provided	Ord Fil	Audit Record Rep
102.126.o01.orm	ORM: Cancel X21	Ord Fil	Ord Plc
102.128.o01.orm	ORM: Status Update (Cancel X21)	Ord Fil	Img Mgr
1502.036	Procedure-Record: Modified	Ord Fil	Audit Record Rep
102.129.dcm	MWL C-Find	Modality	Ord Fil
1502.038	Modality Worklist Provided	Ord Fil	Audit Record Rep
102.130.o01.orm	ORM: Order P22	Ord Fil	Ord Plc
1502.040	Patient-Record: Accessed	Ord Fil	Audit Record Rep
1502.042	Patient-Record: Modified	Ord Fil	Audit Record Rep
102.132.o02.orm	ORR: Placer Order Number	Ord Plc	Ord Fil
102.134.o01.orm	ORM: Schedule X22	Ord Fil	Img Mgr
1502.044	Patient-Record: Accessed	Ord Fil	Audit Record Rep
1502.046	Procedure-Record: Created	Ord Fil	Audit Record Rep
102.135.dcm	MWL C-Find	Modality	Ord Fil
1502.048	Modality Worklist Provided	Ord Fil	Audit Record Rep
x	Skip the imaging part		
102.136.a03.adt	A03: Discharge BROWN	ADT	Ord Plc, Ord Fil
102.138.a03.adt	A03: Discharge BROWN	Ord Fil	Img Mgr
1502.050	Patient-Record: Accessed	ADT	Audit Record Rep
1502.052	Patient-Record: Modified	ADT	Audit Record Rep

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### 3.3 Test Case 1503: Unidentified #1

Test case 1503 repeats the transactions defined for case 103. We add the audit record messages that would normally occur as a result of the operations in this case. We omit “startup” messages such as system startup and user authentication. In some instances, commercial products may send more or fewer audit messages than those listed in the table below. For example, the Patient-Record message can be for records that are Created, Modified or Accessed. The ADT system will probably send messages for both Accessed and Modified when a patient is registered, but it is possible they will also send a message for Created. That depends on the implementation of the ADT system.

Identifier	Description	Source	Destination
	Unidentified case 1		
103.102.a04.adt	A04: Register DOE^J1 (Patient Class = 'E')	ADT	Ord Plc, Ord Fil
1503.002	Patient-Record: Created	ADT	Audit Record Rep
1503.004	Patient-Record: Accessed	ADT	Audit Record Rep
1503.006	Patient-Record: Modified	ADT	Audit Record Rep
103.104.o01.orm	ORM: Order P1 (one procedure)	Ord Plc	Ord Fil
1503.008	Patient-Record: Accessed	Ord Plc	Audit Record Rep
1503.010	Patient-Record: Modified	Ord Plc	Audit Record Rep
103.106.o01.orm	ORM: Schedule X1 (one SPS, one AI)	Ord Fil	Img Mgr
1503.012	Patient-Record: Accessed	Ord Fil	Audit Record Rep
1503.014	Procedure-Record: Created	Ord Fil	Audit Record Rep
103.108.dcm	MWL C-Find	Mod	Ord Fil
1503.016	DicomQuery	Ord Fil	Audit Record Rep
103.110.dcm	PPS: Begin procedure	Mod	PPS Mgr
103.112.dcm	PPS: End procedure	Mod	PPS Mgr
1503.018	Begin-storing-instances	Mod	Audit Rec Rep
103.114.dcm	C-Store (images)	Mod	Img Mgr
103.116.dcm	Storage Commitment (N-Action)	Mod	Img Mgr
103.118.dcm	Storage Commitment (N-Event)	Img Mgr	Mod
1503.020	InstancesStored	Img Mgr	Audit Rec Rep
103.120.dcm	C-Find	Img Disp	Img Mgr
	Patient is now recognized as Silverheels		
103.130.a08.adt	A08: Update name to SILVERHEELS	ADT	Ord Plc, Ord Fil
1503.022	Patient-Record: Accessed	ADT	Audit Record Rep
1503.024	Patient-Record: Modified	ADT	Audit Record Rep
103.132.a08.adt	A08: Update name to SILVERHEELS	Ord Fil	Img Mgr

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1503.026	Patient-Record: Accessed	Ord Fil	Audit Record Rep
1503.028	Patient-Record: Modified	Ord Fil	Audit Record Rep
103.134.dcm	C-Find	Img Disp	Img Mgr
1503.030	DicomQuery	Img Mgr	Audit Record Rep

### **3.4 Test Case 1505: Unidentified #3**

Test case 1505 repeats the transactions defined for case 105. We add the audit record messages that would normally occur as a result of the operations in this case. We omit “startup” messages such as system startup and user authentication. In some instances, commercial products may send more or fewer audit messages than those listed in the table below. For example, the Patient-Record message can be for records that are Created, Modified or Accessed. The ADT system will probably send messages for both Accessed and Modified when a patient is registered, but it is possible they will also send a message for Created. That depends on the implementation of the ADT system.

### 3.5 Test Cast 1511: Simple Imaging Report

Test case 1511 combines the structure of separate tests for report creators, managers, repositories and readers. A simple workflow of report created, verified, stored and retrieved is used. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

Identifier	Description	Source	Destination
	C-Store (Report)	Report Creator	Report Manager
1511.010	BeginStoringInstances	Report Creator	Audit Record Repos
1511.012	DICOM-instances-used	Report Manager	Audit Record Repos
	C-Store (final report)	Report Manager	Report Repository
1511.014	BeginStoringInstances	Report Manager	Audit Record Repos
	C-Find	Report Reader	Report Repository
1511.016	DICOMQuery	Report Repository	Audit Record Repos
	C-Move	Report Reader	Report Repository
1511.018	BeginStoringInstances	Report Repository	Audit Record Repos
1511.020	InstancesSent	Report Repository	Audit Record Repos
1511.022	DICOM-instances-used	Report Reader	Audit Record Repos

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### 3.6 Test Case 1591: Modality Simple Case, One SPS

Test case 1591 repeats the test sequences used for Modality Test 211. Test 1591 is only intended for modalities, so messages that might be sent by other systems in a fully integrated environment are omitted. This test also omits startup and other user authentication messages.

Identifier	Description	Source	Destination
x	MWL Entry for patient MODALITY^211 appears	MESA tools	
x	MWL query for worklist	Modality	MESA Order Filler
x	PPS: Begin procedure (X1)	Modality	MESA PPS Manager
x	PPS: End procedure (X1)	Modality	MESA PPS Manager
1591.010	Begin-storing-instances	Modality	MESA Audit Record Rep
x	C-Store (Images)	Modality	MESA Img Mgr
x	Storage Commitment N-Action	Modality	MESA Img Mgr
x	Storage Commitment N-Event	MESA Img Mgr	Modality

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## 4 Teaching File/Clinical Trial Tests

This section contains tests that are normally associated with the Teaching File/Clinical Trial profile. Because of profile overlap, this section may contain tests associated with other profiles and other sections may contain tests for the Teaching File/Clinical Trial profile.

### 4.1 Test Cast 3001: Simple Single Study Teaching File Export

#### 4.1.1 Profiles Covered

Teaching File/Clinical Trial

#### 4.1.2 Actors Involved

Export Selector

Export Manager

Receiver

#### 4.1.3 Technical Framework References

#### 4.1.4 References to Other Standards/Documents

#### 4.1.5 Prerequisite Tests

None

#### 4.1.6 Test Description

Test case 3001 exercises the basic set of transactions needed to support the teaching file export workflow. The images sent by the Export Selection actor are deidentified by the Export Manager, who then transmits them to the Receiver. The SOP Instances utilized for this test do not have the Attribute Patient Identity Removed (0012,0062) present. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

#### 4.1.7 Test Steps

Identifier	Description	Transaction	Source	Destination
3001.010.dcm	C-Store of the DICOM objects to be exported to the teaching file, all of which are from the same study.	RAD-50 Store Instances	Export Selector	Export Manager
3001.020.dcm	C-Store of the KOS document that holds the manifest of objects being exported for	RAD-51 Store Export	Export Selector	Export Manager

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	the teaching file. The Document Title shall be EV (TCE001, IHERADTF, “For Teaching File Export”) with no Document Title Modifier.	Selection		
3001.030.dcm	C-Store of the de-identified KOS document that holds the manifest, along with the de-identified DICOM objects. If the Attribute Patient Identity Removed (0012,0062) is not present, or is present with its value set to NO, the Export Manager shall de-identify the data in the SOP instances in accordance with the configuration information. The Export Manager shall insure that the de-identified objects have the Attribute Patient Identity Removed (0012,0062) present with its value set to YES. If the Export Manager performed the de-identification, it shall also add a value for De-identification Method (0012,0063) or De-identification Method Code Sequence (0012,0064) to each SOP Instance describing how the object was de-identified. Any UIDs replaced (e.g. Study Instance UID) shall be internally consistent within all of the de-identified SOP Instances.	RAD-53 Export Instances	Export Manager	Receiver

## 4.2 Test Cast 3002: Single Study Teaching File Export with Added Information

### 4.2.1 Profiles Covered

Teaching File/Clinical Trial

### 4.2.2 Actors Involved

Export Selector

Export Manager

Receiver

### 4.2.3 Technical Framework References

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#### 4.2.4 References to Other Standards/Documents

#### 4.2.5 Prerequisite Tests

None

#### 4.2.6 Test Description

Test case 3002 exercises the option of sending additional teaching file information. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

#### 4.2.7 Test Steps

Identifier	Description	Transaction	Source	Destination
3002.010.dcm	C-Store of the DICOM objects to be exported to the teaching file. The Document Title shall be EV (TCE001, IHERADTF, "For Teaching File Export") with no Document Title Modifier.	RAD-50 Store Instances	Export Selector	Export Manager
3002.020.dcm	C-Store of the SR with the Document Title (TCE006, IHERADTF, "Additional Teaching File Information") containing the additional teaching file information.	RAD-52 Store Additional Teaching File Information	Export Selector	Export Manager
3002.030.dcm	C-Store of the KOS document that holds the manifest of objects being exported for the teaching file.	RAD-51 Store Export Selection	Export Selector	Export Manager
3002.040.dcm	C-Store of the de-identified KOS document that holds the manifest, along with the de-identified DICOM objects and the de-identified SR holding the additional teaching file information	RAD-53 Export Instances	Export Manager	Receiver

### 4.3 Test Cast 3003: Teaching File Export with Wait for More Data Sent via DICOM

#### 4.3.1 Profiles Covered

Teaching File/Clinical Trial

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#### 4.3.2 Actors Involved

Export Selector

Export Manager

Receiver

#### 4.3.3 Technical Framework References

#### 4.3.4 References to Other Standards/Documents

#### 4.3.5 Prerequisite Tests

None

#### 4.3.6 Test Description

Test case 3003 exercises the option of waiting for additional data. In this use case the data being waited for is transferred via DICOM, followed by a final manifest that includes the additional data. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

#### 4.3.7 Test Steps

Identifier	Description	Transaction	Source	Destination
3003.010.dcm	C-Store of the DICOM objects to be exported to the teaching file	RAD-50 Store Instances	Export Selector	Export Manager
3003.020.dcm	C-Store of the KOS document that holds the manifest of objects exported thus far for the teaching file. The Document Title shall be EV (TCE001, IHERADTF, "For Teaching File Export"), and the Document Title Modifier shall have a Wait value.	RAD-51 Store Export Selection	Export Selector	Export Manager
3003.030.dcm	C-Store of additional DICOM objects to be exported to the teaching file	RAD-50 Store Instances	Export Selector	Export Manager
3003.040.dcm	C-Store of the KOS document that holds the manifest of complete set of DICOM objects being exported to the teaching file. The Document Title shall be EV (TCE001, IHERADTF, "For Teaching File Export"), and the Document Title Modifier shall not have a Wait value.	RAD-51 Store Export Selection	Export Selector	Export Manager
3003.050.dcm	C-Store of the de-identified KOS document that holds the complete	RAD-53 Export	Export Manager	Receiver

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	manifest, along with the de-identified DICOM objects.	Instances		

#### 4.4 Test Case 3004: Teaching File Export with Wait for More Data Sent via Alternate Path

Test case 3004 exercises the option of waiting for additional data. In this use case the data being waited for is transferred via some alternate means, and then transformed into a DICOM SR, followed by a final manifest that includes a reference to the additional data. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

Identifier	Description	Transaction	Source	Destination
3004.010.dcm	C-Store of the DICOM objects to be exported to the teaching file	RAD-50 Store Instances	Export Selector	Export Manager
3004.020.dcm	C-Store of the KOS document that holds the manifest of objects exported thus far for the teaching file. The Document Title shall be EV (TCE001, IHERADTF, "For Teaching File Export"), and the Document Title Modifier shall have a Wait value.	RAD-51 Store Export Selection	Export Selector	Export Manager
3004.030.dcm	The additional information, in the form of a text document, arrives at the export manager via alternate means. Internally, the export manager transforms the text document into an SR.			Export Manager
3004.050.dcm	C-Store of the de-identified KOS document that holds the complete manifest, along with the de-identified DICOM objects, including the SR that holds the additional information. The Export Manager shall remove the Document Title Modifier that held the Delay for Reason prior to transmitting the manifest.	RAD-53 Export Instances	Export Manager	Receiver

#### 4.5 Test Case 3005: Teaching File Export with the De-Identify Pixel Data Option Triggered by the Burned In Annotation Attribute

Test case 3005 exercises the option of blanking out any patient identifying information burned into the pixel data. In this use case the data being transferred via DICOM is Ultrasound data that has patient identifying information (e.g. patient name) burned into the pixel data. The DICOM SOP Instances transferred have the DICOM Attribute Burned In Annotation Burned In Annotation (0028,0301) set to Yes. After completing the pixel data de-identification, the Export

Manager shall set this attribute to NO. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

Identifier	Description	Transaction	Source	Destination
3005.010.dcm	C-Store of the DICOM objects to be exported to the teaching file that include patient identifying information burned into the pixel data.	RAD-50 Store Instances	Export Selector	Export Manager
3005.020.dcm	C-Store of the KOS document that holds the manifest of objects exported thus far for the teaching file. The Document Title shall be EV (TCE001, IHERADTF, "For Teaching File Export").	RAD-51 Store Export Selection	Export Selector	Export Manager
3005.030	The Export Manager de-identifies the burned-in annotation, typically by triggering an image editing program where the operator blanks out sensitive information burned into the pixel data.			
3005.050.dcm	C-Store of the de-identified KOS document that holds the complete manifest, along with the de-identified DICOM objects. The de-identified objects shall have the DICOM Attribute Burned In Annotation set to NO. The Export Manager shall insure that the de-identified objects have the Attribute Patient Identity Removed (0012,0062) present with its value set to YES. If the Export Manager performed the de-identification, it shall also add a value for De-identification Method (0012,0063) or De-identification Method Code Sequence (0012,0064) to each SOP Instance describing.	RAD-53 Export Instances	Export Manager	Receiver

#### 4.6 Test Case 3006: Teaching File Export with the De-Identify Pixel Data Option Triggered by the SOP Class UID

Test case 3006 exercises the option of blanking out any patient identifying information burned into the pixel data. In this use case the data being transferred via DICOM is Secondary Capture data that has patient identifying information (e.g. patient name) burned into the pixel data. The DICOM SOP Instances transferred shall not have the DICOM Attribute Burned In Annotation Burned In Annotation (0028,0301) present. Instead, the Export Manager shall be configured to trigger the de-identification of pixel data based on the SOP Class UID for Secondary Capture. After completing the pixel data de-identification, the Export Manager shall set this attribute to NO. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

Identifier	Description	Transaction	Source	Destination
3006.010.dcm	C-Store of the DICOM objects to be exported to the teaching file that include patient identifying information burned into the pixel data.	RAD-50 Store Instances	Export Selector	Export Manager
3006.020.dcm	C-Store of the KOS document that holds the manifest of objects exported thus far for the teaching file. The Document Title shall be EV (TCE001, IHERADTF, "For Teaching File Export").	RAD-51 Store Export Selection	Export Selector	Export Manager
3006.030	The Export Manager de-identifies the burned-in annotation, typically by triggering an image editing program where the operator blanks out sensitive information burned into the pixel data.			
3006.050.dcm	C-Store of the de-identified KOS document that holds the complete manifest, along with the de-identified DICOM objects. The de-identified objects shall have the DICOM Attribute Burned In Annotation (0028,0301) set to NO. The Export Manager shall insure that the de-identified objects have the Attribute Patient Identity Removed (0012,0062) present with its value set to YES. If the Export Manager performed the de-identification, it shall also add a value for De-identification Method (0012,0063) or De-identification Method Code Sequence (0012,0064) to each SOP Instance describing.	RAD-53 Export Instances	Export Manager	Receiver

#### 4.7 Test Case 3007: Clinical Trial Export with Remapped Identifiers

Test case 3007 exercises the option of remapping identifiers, if available. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

Identifier	Description	Transaction	Source	Destination
3007.010.dcm	C-Store of the first set of DICOM objects to be exported to the teaching file from a particular patient.	RAD-50 Store Instances	Export Selector	Export Manager
3007.020.dcm	C-Store of the KOS document that holds the manifest of objects exported for the clinical trial. The Document Title shall be EV (TCE002, IHERADTF, "For Clinical Trial Export").	RAD-51 Store Export Selection	Export Selector	Export Manager
3007.030	The Export Manager replaces the Patient ID with one specified for the clinical trial,			

	and performs de-identification of the remainder of the data. The Export Manager shall insure that the de-identified objects have the Attribute Patient Identity Removed (0012,0062) present with its value set to YES. If the Export Manager performed the de-identification, it shall also add a value for De-identification Method (0012,0063) or De-identification Method Code Sequence (0012,0064) to each SOP Instance describing.			
3007.040.dcm	C-Store of the de-identified KOS document that holds the complete manifest, along with the de-identified DICOM objects.	RAD-53 Export Instances	Export Manager	Receiver
3007.050.dcm	C-Store of the second set of DICOM objects to be exported for the clinical trial from the same patient.	RAD-50 Store Instances	Export Selector	Export Manager
3007.060.dcm	C-Store of the KOS document that holds the manifest of objects exported thus far for the teaching file. The Document Title shall be EV (TCE002, IHERADTF, "For Clinical Trial Export").	RAD-51 Store Export Selection	Export Selector	Export Manager
3007.070	The Export Manager replaces the Patient ID with one specified for the clinical trial, and performs de-identification of the remainder of the data. This Patient ID shall be the same one used in the export of the first set of DICOM objects. The Export Manager shall insure that the de-identified objects have the Attribute Patient Identity Removed (0012,0062) present with its value set to YES. If the Export Manager performed the de-identification, it shall also add a value for De-identification Method (0012,0063) or De-identification Method Code Sequence (0012,0064) to each SOP Instance describing.			
3007.080.dcm	C-Store of the de-identified KOS document that holds the complete manifest, along with the de-identified DICOM objects.	RAD-53 Export Instances	Export Manager	Receiver

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#### 4.8 Test Case 3008: Teaching File Export with the Attribute Patient Identity Removed Set to NO

Test case 3008 is similar to test case 3001 except that the SOP Instances utilized for this test shall have the Attribute Patient Identity Removed (0012,0062) present with a value of NO. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

Identifier	Description	Transaction	Source	Destination
3008.010.dcm	C-Store of the DICOM objects to be exported to the teaching file, all of which are from the same study.	RAD-50 Store Instances	Export Selector	Export Manager
3008.020.dcm	C-Store of the KOS document that holds the manifest of objects being exported for the teaching file. The Document Title shall be EV (TCE001, IHERADTF, "For Teaching File Export") with no Document Title Modifier.	RAD-51 Store Export Selection	Export Selector	Export Manager
3008.030.dcm	C-Store of the de-identified KOS document that holds the manifest, along with the de-identified DICOM objects. Since the Attribute Patient Identity Removed (0012,0062) present with its value set to NO, the Export Manager shall de-identify the data in the SOP instances in accordance with the configuration information. The Export Manager shall insure that the de-identified objects have the Attribute Patient Identity Removed (0012,0062) present with its value set to YES. If the Export Manager performed the de-identification, it shall also add a value for De-identification Method (0012,0063) or De-identification Method Code Sequence (0012,0064) to each SOP Instance describing how the object was de-identified. Any UIDs replaced (e.g. Study Instance UID) shall be internally consistent within all of the de-identified SOP Instances.	RAD-53 Export Instances	Export Manager	Receiver

#### 4.9 Test Case 3009: Teaching File Export with the Attribute Patient Identity Removed Set to YES

Test case 3009 is similar to test case 3001 except that the SOP Instances utilized for this test shall have the Attribute Patient Identity Removed (0012,0062) present with a value of YES. In this case, the Export Manager shall not perform any de-identification, since it has already been

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done. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

Identifier	Description	Transaction	Source	Destination
3009.010.dcm	C-Store of the DICOM objects to be exported to the teaching file, all of which are from the same study.	RAD-50 Store Instances	Export Selector	Export Manager
3009.020.dcm	C-Store of the KOS document that holds the manifest of objects being exported for the teaching file. The Document Title shall be EV (TCE001, IHERADTF, "For Teaching File Export") with no Document Title Modifier.	RAD-51 Store Export Selection	Export Selector	Export Manager
3009.030.dcm	C-Store of the de-identified KOS document that holds the manifest, along with the de-identified DICOM objects. Since the Attribute Patient Identity Removed (0012,0062) is present with its value set to YES, the Export Manager shall not alter the exported SOP Instances in any way.	RAD-53 Export Instances	Export Manager	Receiver

#### 4.10 Test Case 3010: Teaching File Export Configured for No De-identification

Test case 3010 is similar to test case 3001, except that the Export Manager shall be configured to not perform any de-identification. As the report is processed, systems will/should generate audit records as the report is reviewed and/or exported.

Identifier	Description	Transaction	Source	Destination
3010.010.dcm	C-Store of the DICOM objects to be exported to the teaching file, all of which are from the same study.	RAD-50 Store Instances	Export Selector	Export Manager
3010.020.dcm	C-Store of the KOS document that holds the manifest of objects being exported for the teaching file. The Document Title shall be EV (TCE001, IHERADTF, "For Teaching File Export") with no Document Title Modifier.	RAD-51 Store Export Selection	Export Selector	Export Manager
3010.030.dcm	C-Store of the unaltered KOS document that holds the manifest, along with the unaltered DICOM objects.	RAD-53 Export Instances	Export Manager	Receiver

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**4.11 Test Case 3003: Teaching File Export with Data from Multiple Studies**

**4.12 Test Case 3003: Teaching File Export with Multiple Manifests for Multiple Export Destinations**

**4.13 Test Case 300x: SOP Instances Already at Export Manager**

**4.14 Test Case 300x: Missing SOP Instance Timeout**

**4.15 Test Case 300x: Unsupported SOP Class UID**

**4.16 Test Case 30xx: Title**

**4.16.1 Profiles Covered**

Teaching File/Clinical Trial

**4.16.2 Actors Involved**

Export Selector

Export Manager

Receiver

**4.16.3 Technical Framework References**

**4.16.4 References to Other Standards/Documents**

**4.16.5 Prerequisite Tests**

None

**4.16.6 Test Description**

Describe test purpose and test itself

**4.16.7 Test Steps**

Table of steps.

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