MIIS InteleConnect User Guide

Version: 1.0

Date: March 2019





Document details

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Version history

Version	Date	Changed by	Description of changes
V0.1	05/03/2019	Nadia Lyne	Draft for Review
V0.2	15/03/2019	Belinda Berkhout	Final

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Gold Coast Hospital and Health Service acknowledges the work conducted by staff and the Metro North Hospital Health Services training team and their resources in the development and preparation of this document.



Document sign off

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Intended Audience

The intended audience of this document includes:

GCHHS Digital Healthcare Training and Change Committee (TACC) GCHHS training, education and learning stakeholders Centre of Excellence, eHealth Queensland

Related documents

The following documents should be considered with this Facilitator Guide:

- MIIS Project Training Strategy
- MIIS Training Plan
- MIIS Project Training Schedule
- MIIS Project Communication Strategy
- Digital Healthcare Program Change Strategy



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How to Use This Guide

This user guide has been prepared to assist staff throughout the Implementation phase of the Medical Imaging Informatics Solution (MIIS) requirement for the InteleConnect EV.

This user guide includes a comprehensive review of InteleConnect EV topics that were demonstrated throughout training of the MIIS. Not all topics were relevant to every MIIS training course.

Exclusions

The following topics are not included in this guide. These topics are part of vendor lead training activities and materials for the following topics will be developed as a parallel activity:

Business Reporting

Format

T Description	Course Description
Objectives	Key learning objectives
Audience	Target audience
Key Message	 Key Users Only Key topics for demonstration and discussion in a supported learning environment This content material will be delivered to Key Users only
Learning Outcomes	 Outline of the awareness and proficiency expectations Where relevant successful completion of classroom exercises will be accepted as part of evidence of competency achievement
Reference	 Related Training Courses TA-005 MIIS Overview (Online) TA-006 Clinical Image Review (Online) TA-007 Clinical Image Review TA-008 Radiology Results Access (Online) TA-009 External Access to Radiology Results
Materials	Related Quick Reference Guide InteleConnect Enhanced Viewer 4 16 1 QuickRef
	User Manuals



- InteleConnect User Manual
- MIIS Support ArrangementsMIIS Downtime Procedures

Video / Other

- Manipulating and Measuring Images in InteleConnect Enhanced Viewer
- Flagging a Critical Result





RIS Training Content Mapping

						2 /		•	<u> -</u>	2	2
DAC	'S Tra	ining Contont		Wei	Wei			ining	B L		t /
		ining Content	>	Revie	Revie	sults	ss to	er Trai	Nursi	_	ologis
Inte	leCor	nnect EV 4.16.1	ervie	nage	nage	y Res	Acce: y Res	/ Use	MID	ΔM	Radic
			TC-005 MIIS Overview	TC-006 Clinical Image Review	TC-007 Clinical Image Review	TC-008 Radiology Results Access	TC-009 External Access to Radiology Results	TC-011 PACS Key User Training	TC-015 MIIS for MID Nursing	TC-017 PACS for MID	TC-018 MIIS for Radiologist /
1.	Soluti	ion Overview	5 ≥	2 ∄	2	Rac Acc	TC Ext	7C	2 ≥	7 A	2 ≥ 3
1.	1.1.	Environment						Х			
		Outline	X	Х	Х	Х	Х		Х	Х	Х
		Results Access	X	х	х	х	х		х	х	Х
		Apple Users	X	х	х	Х	х		х	х	Х
		External Access									
		Internet Explorer 6&7									
	1.2.		X	Х	Х	Х	Х	Х	Х	Х	Х
		Internal									
		External (GP's)									
		Login Time Out									
	1 2	Application Support						V			
	1.3.	Support Escalation Pathway		Х	Х	Х	Х	Х		Х	Х
		Service Calls		^	^	^	^			X	^
		Infrastructure Support									
		System Configuration Settings									
2.	Custo	misation									
	2.1.	User Preferences		х	х	Х	Х	Х		Х	Х
		Contact Details									
		Notification Preferences									
	2.2.	Notifications		х	х	Х	х	Х		х	Х
	2.3.	Messaging						х			Х
3.	Searc	hing									
	3.1.	Default Patient Lists		х	х	х	х	Х		Х	Х
		Default List									
		Control Cog									
	3.2.	Creating Custom Patient Work Lists		Х	Х	Х	Х	Х		Х	Х
	3.3.			Х	Х	Х	Х	Х	Х	Х	Х
		Restricted (Break Glass) Patient Search		Х	Х	Х	Х	X		Х	Х
4.		nt Records									
		Patient Matching		X	Х	X	X	X	X	X	Х
		Exam Order Status		X	X	X	X	X	Х	X	X
		Critical Results Image Availability		X	X	X	X X	X		X	X
5.		Review		^	^	^	^	X		^	Х
Э.		Case Viewer Overview		Х	Х	Х	х	Х		Х	х
	3.1.	Scheduling Details		A			^		Х		
	5.2.	Report & Order PDF		Х	Х	Х	Х	Х		Х	Х
		Launching InteleViewer		X	X	X	X	X		X	X
		Granting Physician Access						х			
	5.5.	Using Case Editor						х			
6.	Image	e Review									
	6.1.	Viewing Images Overview		Х	Х	Х	Х	Х		Х	Х
	6.2.	Basic Image Manipulation Tools						Х			
		Toolbar Functions		Х	Х	Х	X			Х	Х
		Synchronising Stacking		Х	Х					Х	Х
		Using Reference Lines		Х	Х					Х	Х
		Using the 3D Cursor		Х	Х					Х	Х
		Using the Cine Tool		X	X					X	X
		Measuring Tools		Х	Х					Х	Х
		Measurement Calibration		v	v	v	v	v		v	V
	6.3.	Advanced Visualisation Tool		Х	Х	Х	Х	X		X	X opic

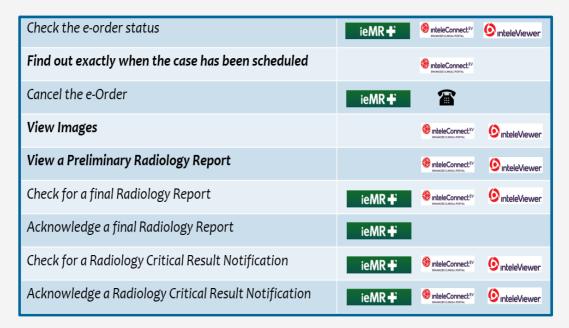
1. Solution Overview

1.1 Environment

Description	Overview of the GCHHS InteleConnect Environment
Objectives	Overview of the InteleConnect environment set up
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users
Key Message	 Outline Deployment of Intelerad InteleConnect EV 4.16 It is a zero footprint, light weight clinical viewer which provides basic clinical review functionality. InteleConnect is not sanctioned for diagnostic review. InteleViewer is a diagnostic viewer when installed on a workstation with diagnostic grade monitors. It runs on any internet browser and platform including mobile devices. Microsoft Edge Chrome Firefox Internet Explorer 8 (or later)
	 Results Access You will no longer be able to access QRiS, Impax or Mediweb. From InteleConnect you can View the patient's Medical Imaging Records including preliminary and final reports View and manipulate images View and acknowledge critical results



• It is expected that InteleConnect, Inteleviewer and the ieMR will provide the primary point of call for clinicians when they want to:



Apple Users

 A iOS version of the InteleConnect application exists but it offers a poorer end user experience and GCHHS will not be rolling this out at Go Live.

External Access

- The InteConnect servers are based in GCUH and Robina datacentres
- External access via a DMZ hosted at BTP is also available. This will provided an
 access option for GCHHS staff and GP's seeking clinical review from outside of the
 GCHHS.

Microsoft Internet Explorer 6&7

InteleConnect EV does not support Microsoft Internet Explorer 6 or 7.



- Understand when and how InteleConnect can assist with results distribution, clinical image review and scheduling information.
- Understand Inteleconnect infrastructure setup

2. User Access

Z. USEI ACCE	:55
Description	User Access
Objectives	Overview of InteleConnect account access
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users
Key Message	Internal PACS* user accounts (InteleConnect and InteleViewer) will automatically be created for: GCHHS Medical GCHHS Nursing Some Gold Coast and Northern NSW GPs Select Allied Health and Admin - Radiographers, Physiotherapists, Speech Pathologists, Dentists and Podiatrists etc. Other staff on application via the 'Apply for an account' button on the InteleConnect login screen. External (GP's) User accounts will need to be created for external users such as GPs GCHHS will automatically create accounts for GP's listed in the STS address book. Login You can launch InteleConnect by: Navigating to the published web address OR Launching via a link on the GCHHS Intranet page

- Before logging in, highlight the link on the login screen to view patient preparation notes and associated information.
- Login to the PACS applications with your existing QH Novell User Name and Password
- When there are three remaining login attempts, a warning appears. If you exceed your password retry limit, InteleConnect locks your user account. You must contact GCHPACSAdmin@health.gld.gov.au or 5687 4406 to reactivate your user account.
- If you are logging in for the first time, you must agree to a confidentiality agreement.

Time Out

- InteleConnect logs you out after a period of inactivity. This feature ensures that
 patient confidentiality is preserved while you are away from your workstation or
 mobile device. Once logged out, you need to log in again.
- The default period of inactivity before the portal logs you out is 15 minutes. Default time outs are attached to the role with which you have been aligned. If your default timeout is a problem please contact <u>GCHPACSAdmin@health.qld.gov.au</u> to discuss options.

Using InteleConnect EV on an iOS Devices

- You can use the InteleConnect EV Portal on an iPad, iPod touch, or iPhone, to view notifications and to read reports by using the Safari web browser.
- Alternatively download the mobile version for use on your mobile device from iTunes or the App Store from Apple.
- To download the InteleConnect EV app:
 - o From your mobile device, click the App store app or the iTunes app.
 - o From the app, locate the Search option, and then type InteleConnect.
 - The InteleConnect EV app appears.
 - o Click Install.
 - The app installation begins. Once the installation is complete, the InteleConnect EV icon appears on your home screen.
- Once you have an account, from the Login page, enter your username and password.



How to login to Inteleconnect

3. Application Support

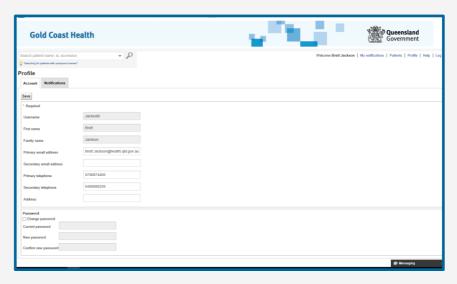
3. Applicat	ion Support
Description	Outline of the GCHHS InteleConnect Support Arrangements
Objectives	Overview of the support arrangements. Make users aware of the support options and escalation pathways.
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users
Key Message	It may be difficult to determine whether a hardware or software issue is the catalyst for the issue being experienced. For software related or application support issues escalate as follows The InteleConnect application has a well compiled online help that can assist with application guidance. You can conduct a general help search or use the Contents or Index tabs to search by topic. In the Search field, enter terms then press Enter
	 Escalate your issue or request to GCHPacsadmin@health.qld.gov.au or 5687 4406 PACS ADMIN will log a service call with the vendor as required. If you suspect a hardware related issue escalate to GCHPacsadmin@health.qld.gov.au or 5687 4406 who will escalate as required.
Learning Outcomes	 Understand the InteleConnect help resources available. Understand the InteleConnect support options and escalation pathways.



4. Customisation

4.1 User Preferences				
Description	Outline of the available user preference settings			
Objectives	Overview of the support arrangements. Make user aware of the support escalation pathways.			
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users			
	Contact Details			
	Users are encouraged to maintain their contact details. MID may refer to your profile if we need to contact you.			
	To set your contact information:			

- 1. Click Profile.
- 2. Click the Account tab.
- 3. Type or edit your email address, telephone numbers, or address.



Key Message

QH Users are unable to reset their password through this page.

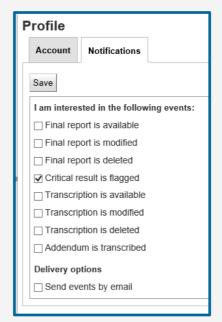
QH user passwords are synchronised with your Novell password

Notification Preferences

• Users can customise notification preferences.



- Some of the above setting are determined at a system level.
- Critical Results Notification is activated for all users and cannot be deselected by users
- Users can turn on the following notifications:



- More information concerning notifications is in the following section
- You can enable / disable some notification preferences are set at the system level.
- Of the notifications that are enabled users can choose whether to enable or disable those notifications in their Notification preferences in their user profile.
- Critical result notifications cannot be disabled.

Notification	Configurable for all users	Configurable per user (in Notification Preferences)
Images Available	yes	yes
Preliminary Report	yes	yes
Preliminary Report Modification		
Preliminary Report Deletion		
Addendum Transcription		
Preliminary Addendum	yes	yes
Final Addendum		
Order Cancellation	yes	по
Critical Results	no, always	yes
Critical Result Modification	enabled	

yes
yes

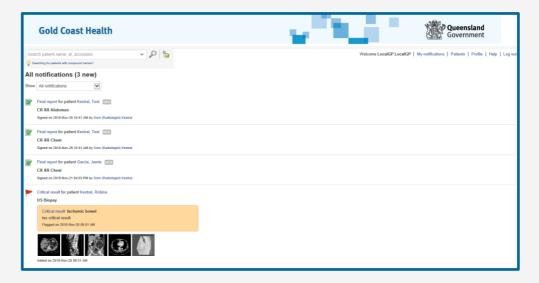


- Understand the online help resources available.
- Understand the PACS support options and escalation pathways.

5. Notifications

Description	InteleConnect Notifi	cations
Objectives	Overview of the Notifi	ication functionality available in InteleConnect.
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users	
	 by the user. Notifications can be s reports, images, critic The default setting is 	e lists all new and recent notifocations for the patients referred et to announce the availability of final reports, preliminary al results, and other information. to have only final reports and Crticial Result Notification show. personal notification preferences to enable other features (see
Key	All Notifications	All new and recent information about the patients who were sent to you from your radiology provider. Notifications announce the availability of final reports, preliminary reports, images, critical results, and other information.
Key Message	My Notifications	Only your preferred notifications, that is, the notifications you selected in your Profile. Urgent or important information that requires your immediate attention and acknowledgement. The number in parentheses indicates the number of pending
	Critical Notifications	critical results (critical results that have not been
	Citical Notifications	completed yet). To complete a critical result, your radiology provider will contact you to acknowledge it. Optionally, your radiology provider will allow you to complete the critical result by acknowledging it yourself.

- You can view up to 10 notifications at a time, up to a maximum of 100 notifications.
- To view the next 10 notifications, click the Show More link.



Critical Results Notifications and Acknowledgement

• The Critical Results Notifications list will display urgent or important information that requires your immediate attention and acknowledgement.



- To acknowledge a critical result, click Acknowledge and then confirm your action.
- This acknowledgement will be returned to MID for monitoring.
- Non acknowledged results may be escalated to your supervisor.
- To return to the list of notifications, click Notifications.



Familiarity with the Notifications functionality and options presented.

6. Searching

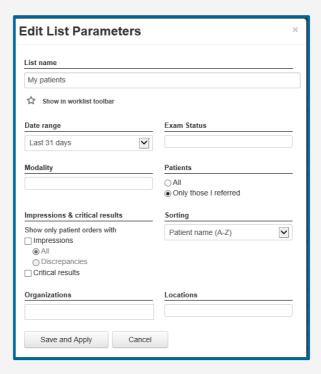
6.1 Default Patient Worklist

Description	Default Patient Work List
Objectives	Overview of the default patient work lists available in InteleConnect
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users
Key Message	You can obtain an overall view of orders by using one of the patient lists. Two lists are available by default for locating patient orders: My Patients and Patients by Location. Use the My Patients list to view orders for patients for whom you are the referring physician. Use the Patients by Location list to view orders for all patients in a specific facility and department. The Patients by Location list is useful in situations where your work location and department change depending on the day of the week. Gold Coast Health Gold Coast Health Garcia, Cathy 1944-Oct-12 F1 476457

- The patients list is updated automatically every minute, but you can update the list
 when necessary by clicking Refresh. You can quickly change the date range and
 sort the list by using the Date Range and Sort By menus respectively.
- From the Patient list, you can perform some or all of the following actions:
 - Search for orders or patients.
 - Edit the My Patients or Patients by Location lists.
 - o Create a custom patient list.
 - View all orders associated with a patient.
 - View a patient order.

To Edit the Default Patient Lists

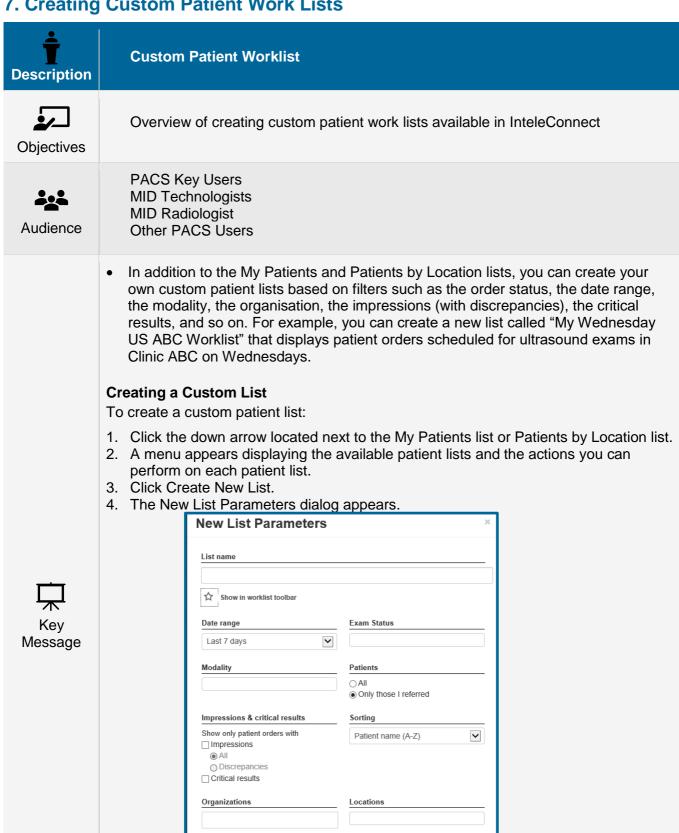
- 1. Click the down arrow located next to the My Patients list or Patients by Location list.
- 2. A menu appears displaying the available patient lists and the actions you can perform on each patient list.
- 3. Click Edit next to the My Patients list, the Patients by Location list, or the name of a custom patient list.
- 4. The Edit List Parameters dialog appears showing the parameters for the selected patient list.
- 5. Modify the necessary parameters and then click Save and Apply.
- 6. The modified patient list is selected and shown.





Familiarity with the InteleConnect default patient lists

7. Creating Custom Patient Work Lists



5. Enter a descriptive name.

Save and Apply

- 6. In the New List Parameters dialog, choose the filters to apply to this new list.
- 7. To add a list button to the toolbar, select the star icon for 'show in worklist toolbar'.
- 8. The Worklist toolbar displays a button that links to your worklist.

Cancel

9. You can click this button to quickly move between worklists.





	 10. Click Save and Apply. InteleConnect EV displays the custom patient list. Your new custom patient list is added to the Patient List menu.
Learning Outcomes	Familiarity with the creating custom work lists

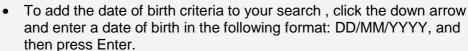
8. Patient Search

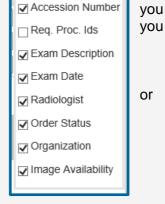
o. Patient S	Dear Cii			
T Description	Patient Search			
Objectives	Overview of the c	onducting a patient s	search	
Audience	PACS Key Users MID Technologist MID Radiologist Other PACS User			
Key Message	 Patient ID (if appliance) Search patient nate in the patient n	or a specific patient o ID (Medical Record N	in the search field reily name or the first ter. Searches are not recession number fibrith to the criteria. tient's last name, you a date of birth. You and date of birth.	epresenting two case- , you can For u can
	west, ma	Weston, Marley	Marshalls, Ginger	

 If you are searching for a patient with a compound given name or compound surname (family name) that contains a space rather than a hyphen, you must insert a comma to identify and isolate the

compound name. For example, if the patient you are searching for has a compound surname such as De Garcia and are performing a search by surname only, must type the following: De Garcia,

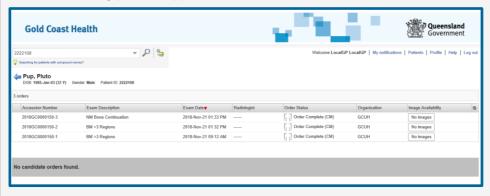
- If you search for the same patient but by surname and given name, you must type either of the following: 'De Garcia, Daniel' 'Daniel, De Garcia'.
- You are not required to use a comma when searching for a patient with a compound name that contains a hyphen rather than a space, such as Mary-Louise White or Thomas Jones-Ford.





Search Results

• If only one patient matches the search criteria, the patient record for the matching patient appears.



 If the list of search results is longer than one page, click a column title to sort the results. To reverse the sort order, click the column title again



 To change the columns that appear, click Select Columns at the far right side of the column headers and then enable or disable the names of the columns to display.



Key Users Only

Accession Number Search

- You can also search for orders by accession number. Search results include all current and prior orders for a patient.
- When you perform a partial search by accession number, the accession numbers are not displayed with the list of patients.
- To view the accession number, select the patient name in the list.
- The accession number appears in the patient record.



 Understand how to search for a patient in InteleConnect and rearrange the patient list



9. Appointment Management

o. Appoint	ment wanagement
Description	Restricted (Break Glass) Search
Objectives	Overview of the restricted break glass search.
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users
	 Some users such as GP's may be restricted from accessing information for a GCHHS patient if they are not the patient's primary referring physician. The clinician may need to override this restriction by using the Break the glass search. Break the Glass Search
Key Message	 To use Break the Glass You must provide either the patients ID or the patients name and date of birth. InteleConnect requires you to accept a confidentiality agreement. You need to accept this agreement only once for an order. InteleConnect does not require you to break glass again to access an order after the first time. You may access only exams that were performed on or before the date you grant yourself access to a patient. To access future orders for the patient, you will need to break the glass again Click the Break the Glass icon adjacent to the search bar The confidentiality agreement appears. To accept the terms of the confidentiality agreement, enable the check box. Do one of the following: Type the full patient ID. Type the full patient ID. Type the comma-separated full patient name and the full patient date of birth. For example, type the following: Jones, John and 19740601. Click Check Patient. The patient name, sex, and age appear. This information allows you to make sure this is in fact the patient for whom you are searching. If this is your patient, click Access Patient Studies. Click Cancel if this is not the patient for whom you are searching. The patient's exams appear. Click an order to view the report and images.
Learning Outcomes	Understand the Break the Glass search functionality





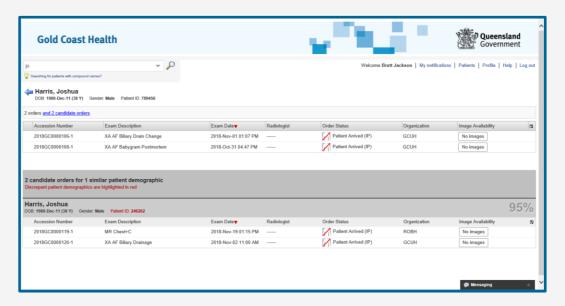
10. Patient Records

10.1 Patient Matching

Objectives Audience	PACS Key MID Techn MID Radiol Other PAC Selecting a patient reco The patient candidate p From the Pace Searce View	ologists logist S Users patient from th	ne search re you to view page, you ca patients. and order s	all orde an perfo	rs associate	ed with th	nat patient	and a
•	MID Techn MID Radiol Other PAC Selecting a patient reco The patient candidate p From the Patient Searce View	patient from the record allows eatient orders. attent Record patient orders or patient orders or patient orders	you to view page, you ca patients. and order s	all orde an perfo	rs associate	ed with th	nat patient	and a
•	patient recording the patient candidate promethe	ord. record allows patient orders. atient Record p ch for orders or patient orders	you to view page, you ca patients. and order s	all orde an perfo	rs associate	ed with th	nat patient	and a
	Gold Coast I Nest Swetting for patients with compound car Kestral, Child DOB: 2010 May 10 (8 Y) Gen	▼ D	ndate patie	nts.	Web	Ç	Queensland Government	Log out
	12 orders Accession Number 2018GC0000102-1	Exam Description MR Abdomen	Exam Date ▼ 2018-Oct-29 11:15 AM	Radiologist	Order Status Scheduled (SC)	Organization GCUH	Image Availability No images	æ
\ 	2018GCU0000117-1 2018GCU0000085-1	CT Abdomen	2018-Oct-17 08:10 AM 2018-Oct-16 05:17 PM		Order Complete (CM)	GCUH GCUH	No images No images	- 1
Key	2018GC0000042-1 2018GCU0000145-1	CT Abdomen CR XR Ankle+Foot Left	2018-Oct-09 01:00 PM 2018-Sep-28 01:37 PM	MAY, Brendon	Patient Arrived (IP) Final Report (ZZ)	GCUH GCUH	No images	- 1
Message	2018GCU0000084-1	CR XR Chest	2018-Sep-28 01:26 PM		Order Complete (CM)	GCUH	Online No images	
oooago	2018GCU0000131-1 2018GCU0000097-1	US Chest NM I-123 MIBG	2018-Sep-27 01:14 PM 2018-Sep-14 12:29 PM	OLIVIER, Jacques	Final Report (ZZ) Patient Arrived (IP)	GCUH NucMedTest	No images	
	2018GCU0000059-1 2018GCU0000060-1	CR XR Forearm Right Mobile CT Head	2018-Sep-10 11:05 AM 2018-Sep-04 11:12 AM		Final Report (ZZ) Order Complete (CM)	GCUH GCUH	Online Online	
	2018GCU0000058-1 2018GCU0000036-1	CR XR Forearm Right Mobile CR XR Chest	2018-Sep-04 11:04 AM 2018-Aug-23 12:43 PM	MAY, Brendon	Order Complete (CM) Final Report (ZZ)	GCUH GCUH	Online No images	
								_1
	No candidate orders found	1.						

Candidate Patients

- A probability-based calculation method is used to search for patients who are a likely match to the current patient except for certain discrepancies in patient information such as date of birth, name, or gender. These likely matches are referred to as candidate patients.
- Candidates appear based on a confidence level and a threshold. The confidence level measures the matching probability of the patient record and is represented by a percentage.
- The threshold is the minimum confidence value above which candidates are
 possible matches and are displayed. For example, if your threshold is set to 50%
 (the default value for the threshold), only patients with a confidence level of 50% or
 higher appear in the Patient Record page. Our threshold is set at 90%.



 You can view images and reports for these candidate patients if you believe they are a match.

To view candidate patient orders:

- 1. Click the candidate order to view the order details and the associated images.
- 2. The selected order is opened in the Case Viewer.



Understand the distinction between patient matches and candidate matches



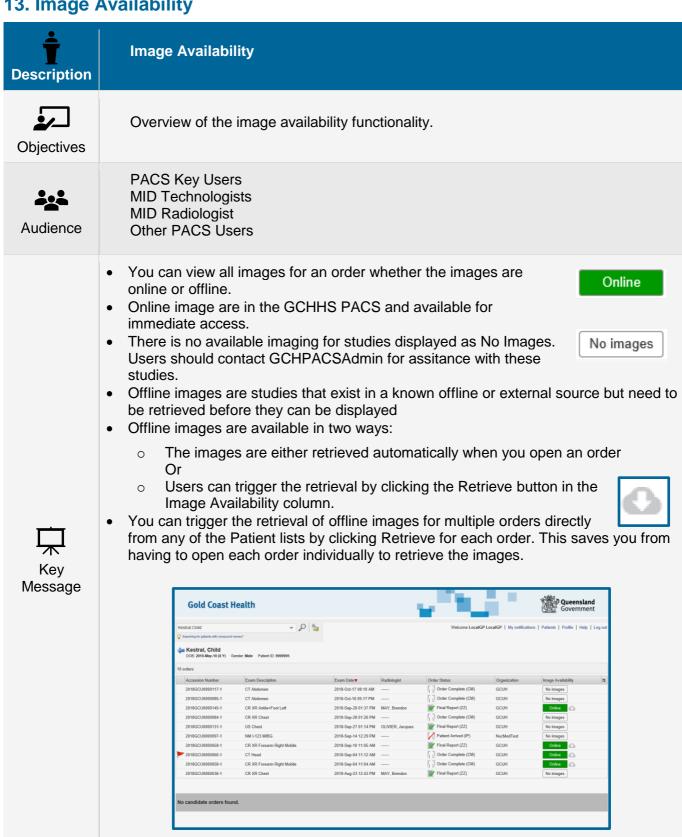
11. Exam / Order Status

III. EXAIII /	Order Status	
Description	Exam Statu	5
Objectives	Overview of	the examination / order statuses displayed in Inteleconnect
Audience	PACS Key U MID Technol MID Radiolo Other PACS	ogists gist
	order. These scheduled ex	ow describes the possible order status icons that appear for a patient icons indicate the progress of the patient order as it starts with a am and ends with a final report. le available by a wall chart or QRG.
	This id	on: Indicates:
		The exam is scheduled.
	M	The patient has arrived.
		Order complete.
Key	(1)	The report has been dictated and a dictation is available.
Message	<u> </u>	The preliminary report is available.
		A critical result is available.
		Impressions are available.
	•	There is a discrepancy with the impression.
		The final report is available.
-		
Learning Outcomes	Understand b	pasic exam/ order statuses displayed in InteleConnect

12. Critical Results

	results	
Description	Criticial Results	
Objectives	Familiarise users w	with the presence and colour coding of crtical results flags.
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users	
Key Message	urgency of the critic The times for comm Make this table ava This flag color: A Col	chere is a critical result shows a colored flag which designates the cal result. Inunicating critical results are default values. Idable by a wall chart or QRG. A critical result. A radiologist or staff member must communicate the critical result finding to you within 60 minutes. An urgent result. A radiologist or staff member must communicate the critical result finding to you within six hours. An important result. A radiologist or staff member must communicate the critical result finding to you within three days. Will launch the Case Viewer which provides access for image a Criticial Result Acknowledgement message back to the MID. iology report must still be acknowledged in the ieMR.
Learning Outcomes	Understand the presence and colour coding of crtical results flags	

13. Image Availability





Understanding of the approvals workflow as it applies to your role

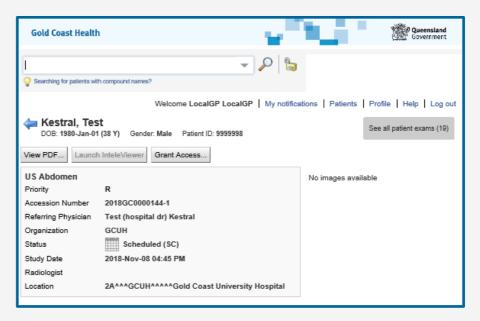
14. Case Review

14.1 Case Viewer Overview

÷	Case Viewer Layout Overview		
Description	Sase viewer Layout Sverview		
Objectives	Overview of the case viewer layout and functions.		
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users		
	 Use the Case Viewer to view detailed information about a patient order. Depending on the order status and contents of the patient order and your privileges, some or all of the following information is available for you to examine: Study information (referring physician, radiologist, scheduled study date, etc.) Patient information Final and Preliminary reports Images Critical results (such as the finding, priority level, and comment) 		
Key Message	Gold Coast Health Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh Putliesh Putliesh Log out Wilsone Brest Jackson My notifications Putliesh Putliesh		

Scheduling Details

• The scheduled date and time for a booked appoint is displayed in the case viewer. This the primary spot for clinicians to llok up the actual booking details.



 Patient preps are not available from this page but a hyperlink to all instructions will be maintained on the IntelConnect login page.

Action Buttons

- There are 2 action buttons displayed
 - View PDF
 - Launch InteleViewer

Series Selector

 The series available for review are displayed as thumbnails. Selecting any Thumbnails will launch the Image Viewer. The Image Viewer functionality will be reviewed in section 6.0

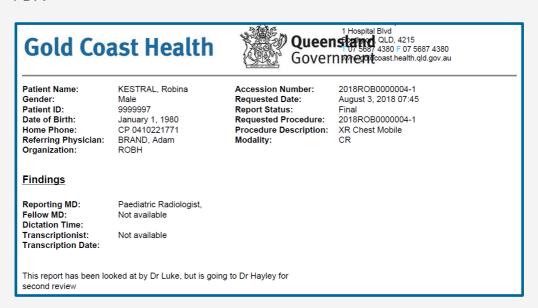


Understand basic screen layout and functionality of the Case Viewer

15. Report and Order PDF

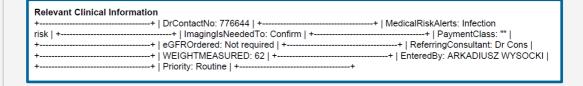
Description	Report and Order PDF
Objectives	Overview of the report and order PDF viewer
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users
	Viewing and Printing Reports / Order Information

 You can generate a printable version of a patient's report. You can save or print the PDF.



Key Message

> The PDF also contains some relevant clinical information from the original order message.



- To generate a printable version of a patient's report:
 - 1. Open a patient order in the Case Viewer.
 - 2. Detailed information about the order appears.
 - 3. Click View PDF
 - 4. The View PDF options dialog appears.
- Enable the checkboxes for the items that you want to appear in the printable report.

- For example, if you want key images to appear in the printable report, enable Include Key Images.
 - 1. Click View PDF.
 - 2. A new browser tab or window appears containing a printable PDF of the report.
 - 3. Use your browser's features to save or print the PDF.



Understanding of the View PDF functionality.

16. Launching InteleViewer

Description	Launching Inteleviewer from InteleConnect
Objectives	Create user awareness of how to launch InteleViewer from within the InteleConnect application.
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users
Key Message	 Viewing Images with InteleViewer You can view images for diagnostic review with InteleViewer. Before launching Inteleviewer make sure your device can support the InteleViewer application. To view images with InteleViewer: In the Case Viewer, click Launch InteleViewer. If InteleViewer is not installed on your computer, you will be redirected to the InteleViewer Tracks page to download the application. It should also be available via the IT Software Centre.
Learning Outcomes	Understanding how to launch InteleViewer from within InteleConnect

17. Granting Physician Access

17. Granting Filysician Access		
Description	Granting Physician Access	
Objectives	Overview of the granting priveleges functionality.	
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users	
Key Message	 You can give another referrer access to orders to which you already have access. You can grant access to only one patient order at a time. To grant access to multiple orders for the same patient, you must repeat the process for each order. To grant access to orders, your user account must be assigned the Referrer Study Access Granting privilege. Although you can grant access to an order, you cannot revoke access. To revoke access to an order, contact GCHPACSAdmin. To grant a physician access to an order: Open an order. In the Case Viewer, click Grant Access. The Grant Access, the Physicians dialog appears. Search for a physician by typing the physician's name in Search by Name. As you type letters, a list of names matching your search criteria appears. InteleConnect will try to match the first, middle or last name based on the initial letters of each. For example, if you type "Jo Sm", the search results will include "John Smith" and "Susan Joanne Smalls". Note: Only the names of physicians with the Clinician primary role appear in the list. Click Grant Access. The Confirmation window appears. Click Confirm. 	
Learning Outcomes	Understanding of the grant access workflow as it applies to your role	

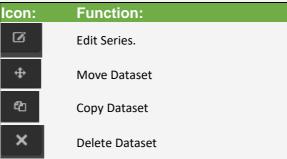
18. Using Case Editor

i di domig	Sase Editor	
Description	Using Case Editor	
Objectives	Overview of the case editor functionality.	
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users	
Key Message	Although you can use the Case Editor to view or edit patient and order information in practice all editing will most lkely be done via InteleBrowser. Depending on the contents of the patient order and your privileges, some or all of the following information is available for you to view or edit: Patient information Patient notes and alerts Assigned technologists, referrers, and reading groups images Search for orders or patients Add a patient note or a patient alert Correct patient information View patient history Edit procedures, referrers, and assignments Add an exam note or an exam alert Move, copy, or delete images Attach documents such as requisition forms and worksheets Correcting Patient Information PACS Administrators can correct inaccurate patient information in the Case Editor. Patient Information should not be edited by general users or key users. In practice all patient information editing shoulud be performed upstream via HBCIS updates. Patient Information Patient Information	

Image Administration

- Although you can use the Case Editor to view or edit image information in practice all editing will most likely be done via InteleBrowser.
- The image routing details window provides basic DICOM series information
- Selecting View launches the study in the Image Viewer
- Selecting Edit provides PACS Administrators with a number of series editing tools. These tools are not available for general users or key users.



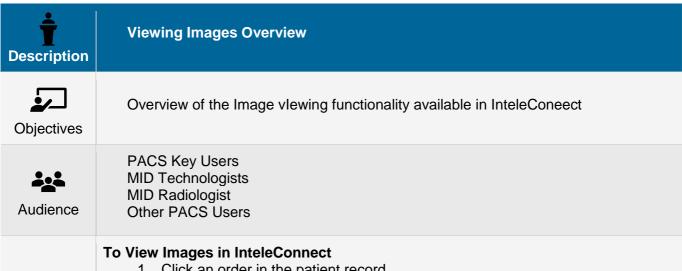




• Familiarity with the case viewer and its potential uses by PACS Admin staff

19. Image Review

19.1 Viewing Images Overview

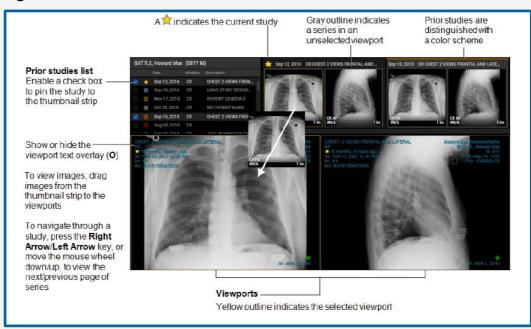


- 1. Click an order in the patient record.
- 2. The Case Viewer appears with the order details.
- 3. Click the thumbnail of the series you want to view.



Using the Interface





Double click on any image to launch in a single viewport
 Understand how open the Image Viewer and manipulate series for viewing Outcomes

20. Basic Image Manipulation Tools

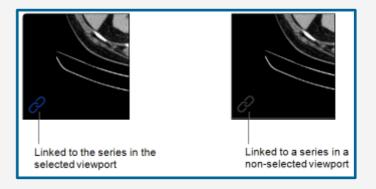
Zu. Dasic i	mage manipulation roots
Description	Image and Viewport Manipulation Tools
Objectives	Overview of the Image viewing functionality available in InteleConnect
Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users
	Toolbar Functions

\Box
'\'
Key
Message

Icon Shortcut		Function		
ø	S	croil through Images. Click and drag or rotate the mouse wheel, move the lewport scroil bar, or press the UP ARROW and Down ARROW keys.		
⊕ -	Tool: W Presets: ALT+3 (Chest); ALT+4 (AbdiPel); ALT+5 (Lung); ALT+6 (Brain); ALT+7 (Bone); ALT+8 (Head/Neck)	Adjust the window level manually by using the Window Level tool, or select a window level preset* (4.14.1.EV.1.3.0 or later) for CT images.		
ø	z	Zoom all Images in the selected viewport. Click and drag up/down to increase/decrease the magnification level.		
*	P	Pan all images in the selected viewport. Click and drag the viewport image to the desired location.		
₽	T.	Invert the colors for all images in the selected viewport.		
≜ ∤≽	SHIFT+H / SHIFT+V	Flip all images in the selected viewport horizontally/vertically.		
	, (comma) / . (period)	Rotate all images in the selected viewport 90 degrees to the left/right.		
♦	В	Reset all Images in the selected viewport.		
1	М	Measure straight lines. Click the start and end points for the line segment.		
<_	SHIFT+A	Measure simple angles. Click the start, vertex, and end points for the angle measurement.		
¥	SHIFT+C	Measure cobb angles. Click the start and end points for the first line, and then the start and end points for the second line.		
/	х	Measure the pixel intensity and color values. Position the mouse cursor over the image location, or click to pin the measurement to the image.		
*	С	Activate or deactivate the 3D Cursor tool (4.14.1.EV.1.2.0 or later).*		
# 1	R	Show or hide reference lines (4.14.1.EV.1.1.0 or later).*		
8	L	Activate or deactivate the Linked Stacking tool (4.14.1.EV.1.3.0 or later)."		
III	1 (1x1); 2 (1x2); \$HIFT+2 (2x1); 3 (1+2); 4 (2x2)	Change the viewport layout. Double-click a viewport for a 1x1 layout.		
四/四	0	Show/hide the text overlay.		
=	T	Activate/deactivate Distraction Free mode to hide/show the toolbar, Studies list, and Thumbnali strip (4.14.1.EV.1.3.16 or later).		
Û		Open the selected viewport dataset in Advanced Visualization mode (4.14.1.EV.1.4.0 or later).		
ē	ALT+P	Print the selected image (4.14.1.EV.1.3.1 or later).		
□ / □	F	Activate/deactivate full-screen mode.		

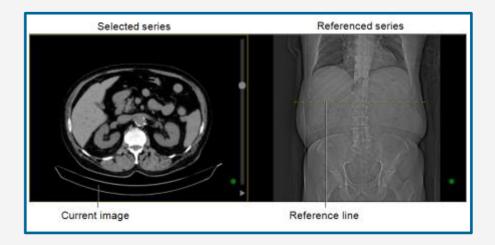
Synchronizing Stacking

- You can use the Linked Stacking tool to synchronize the stacking of multiple series from the same study that were imaged on parallel planes.
- When you activate the Linked Stacking tool, InteleConnect Enhanced Viewer automatically links all series from the same study that were imaged on parallel planes.
- Linked series are identified by a Linked Stacking icon in the viewports.
- If the viewports contain series from different studies, InteleConnect Enhanced Viewer creates a separate link for each study. In this case, the Linked Stacking icon appears blue if the series is linked to the series in the selected viewport, or gray if the series is linked to a series in a non-selected viewport.



Using Reference Lines

- Reference lines are typically used for CT and MR studies. You can activate them to highlight the location of the current image slice on another image of an intersecting plane from the same study.
- When activated, a reference line appears on the referenced series, indicating where
 the current image in the selected series is positioned in relation to the referenced
 series. As you stack through the images, the reference line updates automatically to
 highlight the current image.



Using the 3D Cursor

 Use the 3D cursor to locate a point in 3D space on a set of multi-planar images from the same study. As you reposition the 3D cursor on the selected image, the 3D cursor position on other images that share the same frame of reference updates automatically. The 3D cursor is typically used for CT and MR studies.

Using the Cine Tool

- You can use the Cine tool to play back cine series in real-time. Cine series are
 datasets that contain multi-frame images that have the DICOM frame rate encoded
 in the DICOM header. Cine series are represented by a Cine icon in the thumbnail
 image.
- You would typically use the Cine Real-Time Player with a temporal series, in which
 each slice corresponds to a different moment in time, yet shows the same location in
 space. Examples of this type of series are an echocardiogram captured by using
 ultrasound or an angiogram captured by using x-ray. When you load a cine series in
 a viewport, cine playback starts automatically at the frame rate specified in the
 series DICOM data.
- You can also use the Cine tool to scroll through images in a spatial series as if they
 were a movie clip, instead of scrolling through the images manually. For non-cine
 series, the Cine tool plays back at the default frame rate of 30 fps.
- You can work in a viewport without interrupting cine playback in another viewport, and you can activate cine playback in multiple viewports simultaneously.

Measuring Tools

- InteleConnect Enhanced Viewer provides you with a set of tools that you can use to take measurements on images. An image can have multiple measurements in any combination. In the case of multiple measurements on an image, you can modify an existing measurement, or add a new measurement, for the currently selected measurement tool only. For example, if an image contains linear and cobb-angle measurements, and the linear measurement tool is selected, you can modify or add a linear measurement only. When you move your mouse cursor over a measurement that corresponds to the currently selected measurement tool, it appears yellow to indicate that the measurement can be changed or moved.
- Measurements apply to, and are saved for, the current viewport session only. If you
 take a measurement on an image, the measurement applies to the current viewport
 only. The measurement does not appear if you load the same image in another
 viewport. All image measurements in a viewport are saved until you replace the
 images in the viewport with another dataset.
- The accuracy and reproducibility of measurements in InteleConnect Enhanced Viewer is dependent on the precision of the user's operation of the mouse. Keep in mind that working with magnified images when drawing measurements helps reduce the margins of error, and working with reduced-magnification images can lead to a greater margin of error.
- Hold the ctrl key when taking a measurement that is close to another measurement.
 This allows you to access a pixel that is close to an existing measurement without selecting that measurement.
- For projection radiography images, InteleConnect Enhanced Viewer displays a
 measurement calibration message in the viewport when you take a line, angle, or
 cobb-angle measurement. You can use the message to determine the relevant
 accuracy of the measurements.
- You can remove measurements from an image by using the delete or backspace key.





Measurement Calibration

- For projection radiography images, such as MG and CR, InteleConnect Enhanced Viewer displays a measurement calibration message when you take a measurement.
- You can use the message that appears to determine the relevant accuracy of the measurements that you take on the image. Each message also includes a tooltip that describes the DICOM attributes that are used to determine measurement calibration.
- Calibrated measurements in InteleConnect Enhanced Viewer, which are measurements displayed in anatomical size as opposed to measurements based on the imager plate, are usually computed from a combination of the following three DICOM attributes:
 - o Imager Pixel Spacing (0018, 1164)
 - o Pixel Spacing (0028, 0030)
 - Estimated Radiographic Magnification Factor (0018, 1114)
- Imager Pixel Spacing (IPS) specifies the actual distance between pixel centers on the imager plate. Pixel Spacing (PS) specifies the physical distance in the patient between the center of each pixel. Estimated Radiographic Magnification Factor (ERMF) is the calibration value to apply to the Imager Pixel Spacing value so that Imager Pixel Spacing is converted to anatomical units. ERMF is the ratio between the Distance Source To Patient and the Distance Source To Detector.
- If the IPS value is valid and an ERMF value is present in the DICOM data, InteleConnect Enhanced Viewer uses the ERMF magnification factor to correct the IPS value so that measurements are displayed in anatomical units.
- **Note**: The IPS value is considered to be invalid when the PS value is greater than the IPS value.



Able to perform basic image manipulation tasks.

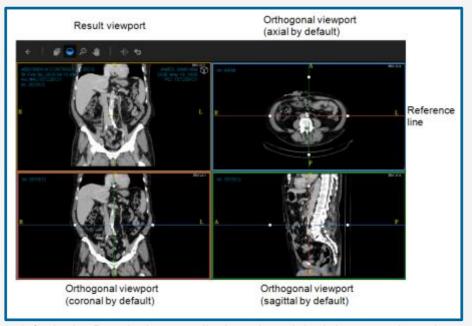
21. Advanced Visualisation Tool

21. Advanced Visualisation Tool					
	Description	Advanced Visualisation Tool			
	Objectives	Overview of the Advanced Visualisation Tool			
	Audience	PACS Key Users MID Technologists MID Radiologist Other PACS Users			
		Toolbar Func	tions		
				Profes	
		lcon	Shortcut	Function Scroil through images. Click and drag or rotate the mouse wheel, move the	
				viewport scroll bar, or press the UP Arrow and Down Arrow keys.	
		⊕ -	Tool: W Presets: ALT+3 (Chest); ALT+4 (Abd/Pel); ALT+5 (Lung); ALT+6 (Brain); ALT+7 (Bone); ALT+8 (Head/Neck)	Adjust the window level manually by using the Window Level tool, or select a window level preset* (4.14.1.EV.1.3.0 or later) for CT images.	
		P	Z	Zoom all Images in the selected viewport. Click and drag upidown to increase/decrease the magnification level.	
		4	Р	Pan all images in the selected viewport. Click and drag the viewport image to the desired location.	
		59	1	Invertithe colors for all images in the selected viewport.	
		1	SHIFT+H / SHIFT+V	Flip all Images in the selected viewport hortzontally/vertically.	
		● / ●	, (comma) / . (period)	Rotate all images in the selected viewport 90 degrees to the left/right.	
		♦	В	Reset all Images in the selected viewport.	
	\vdash	1	М	Measure straight lines. Click the start and end points for the line segment.	
	人	<	SHIFT+A	Measure simple angles. Click the start, vertex, and end points for the angle measurement.	
	Key Message	₹	SHIFT+C	Measure cobb angles. Click the start and end points for the first line, and then the start and end points for the second line.	
		_	х	Measure the pixel intensity and color values. Position the mouse cursor over the	
		•	С	image location, or click to pin the measurement to the image. Activate or deactivate the 3D Cursor tool (4.14.1.EV.1.2.0 or later)."	
		ψĺ	R	Show or hide reference lines (4.14.1.EV.1.1.0 or later).*	
		0	L	Activate or deactivate the Linked Stacking tool (4.14.1.EV.1.3.0 or later)."	
		III	1 (1x1); 2 (1x2); \$HIFT+2 (2x1); 3 (1+2); 4 (2x2)	Change the viewport layout. Double-click a viewport for a 1x1 layout.	
		日/日	0	Show/hide the text overlay.	
		=	Т	Activate/deactivate Distraction Free mode to hide/show the toolbar, Studies list, and Thumbnall strip (4.14.1.EV.1.3.16 or later).	
		•		Open the selected viewport dataset in Advanced Visualization mode (4.14.1.EV.1.4.0 or later).	
		ē	ALT+P	Print the selected image (4.14.1.EV.1.3.1 or later).	

Activate/deactivate full-screen mode.

Advanced Visualisation

- The Advanced Visualization feature provides you with advanced imaging capabilities for CT and MR images by automatically creating orthogonal reconstructions of the original volume.
- You can manipulate the orthogonal reconstructions to get a detailed view
 from different angles, and view a specific anatomical point in the original
 image from different planes. For example, you can investigate a region of interest in
 the original image by triangulating to that point to see the region clearly from
 different orthogonal planes.
- When you launch Advanced Visualization mode, the reconstructed volume appears
 in four viewports. The Result viewport and three orthogonal viewports that show the
 reconstructions in axial, coronal, and sagittal orientations by default. The orientation
 of the images in the viewports may change based on the manipulations that you
 make.



- By default, the Result viewport displays the original dataset volume in a coronal orientation with a slab thickness of 5 mm using Maximum Intensity Projection (MIP) rendering.
- The Result viewport includes a Reconstruction toolbar that you can use to modify the reconstruction, such as change the orientation, slab algorithm, and slab thickness, or apply a 3D color reconstruction.
- You can use the tools in the Reconstruction toolbar to change the slab thickness and slab algorithm, change the anatomical plane, and apply a 3D color reconstruction to the image.



Understand how to perform a basic MPR.