

eCTAS HL7 Message Viewer Training Application Complex

Training Team



**Ontario
Health**

Session Logistics



Intended Audience

Integration: Application Complex

Hospital Technical Leads, eCTAS Coordinators and resources responsible for monitoring HL7 Messages



This session is being recorded

It will be posted to the Online Help



Press  to mute. Press  to unmute.

Agenda

- About the HL7 Message Viewer
- Learning Objectives
 1. Logging In and Navigation
 2. Message Status Summary
 3. Messages Grouped by Patient Visit
 4. Troubleshooting and Best Practices
- Next Steps
- Resources

eCTAS Integration Types

Application Basic

- Completes all stages of triage in the eCTAS application
- No communication with the HIS / EDIS

Application Complex

- Triage using both eCTAS and the HIS
- Information is shared via HL7 messages

Web Service Integration

- Patient data is entered into the HIS / EDIS
- eCTAS receives and stores the triage data from the HIS / EDIS and returns a CTAS score

Certification Integration

- Hospitals build the decision support algorithm directly into their HIS / EDIS
- This is certified to ensure alignment with provincial system

About the HL7 Message Viewer

HL7 Message Viewer

































































- Supports conformance testing
- Provides evidence that your facility's technical configuration aligns with your operational workflow
- You will be responsible to monitor error messages and resolve related issues
- Monitoring and resolving issues is an ongoing commitment to:
 - Maintain seamless workflow
 - Prevent or reduce future errors
 - Optimize data quality







Supports integration between eCTAS and your HIS

Path of HL7 messages

Depends on your hospital's workflow

Event Class	Workflow/Scenario						
	1	2	3	4	5	6	7
Pre-Triage/Receiving	 > 	 > 	 > 	 > 	 > 	 > 	 > 
Update	 < 		 < 	 > 	 > 	 > 	
Triage Assessment	 > 	 > 	 > 	 > 	 > 	 > 	
Triage Re-Assessment	 > 		 > 	 > 			
Patient Registration	 > 	 > 	 > 	 > 	 > 	 > 	
Transfer of Accountability (TOA)	 > 	 > 	 > 	 > 	 > 		

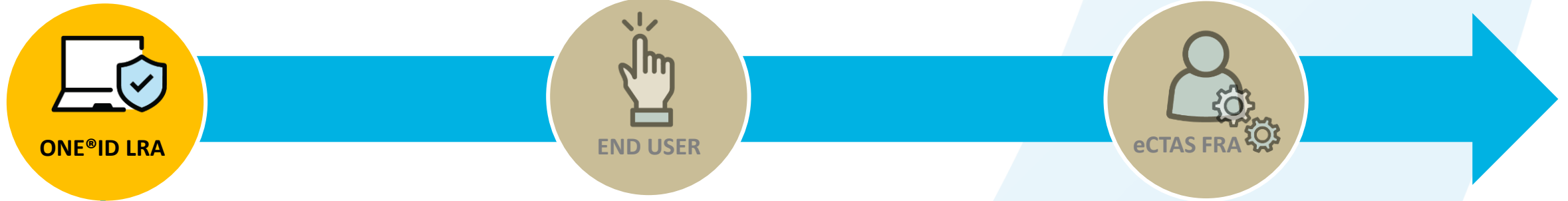
eCTAS Environments and Applications

Environments	Application	URL	Purpose
Production (LIVE SYSTEM)	Clinical Application 	https://ectas.ccohealth.ca/	<ul style="list-style-type: none"> Used by triage nurses to triage real patients Access clinical application Contains real patient data
	Administration Console 	https://ectas-admin.ccohealth.ca/	<ul style="list-style-type: none"> Used by resources to access features such as: Site Role Management, Registration View, Site Level Extracts, HL7 Viewer Contains real patient data
Conformance (TRAINING & CONFORMANCE TESTING)	Clinical Application 	https://confectas-spa.ccohealth.ca/	<ul style="list-style-type: none"> Used to train nurses on the clinical application using fake patient data only Used for conformance testing using fake patient data only Should never contain real patient data
	Administration Console 	https://confectas-admin.ccohealth.ca/	<ul style="list-style-type: none"> Used to train resources on how to use features (i.e. Site Role Management, Registration View, Site Level Extracts, HL7 Viewer) using fake patient data only Used for conformance testing using fake patient data only Should never contain real patient data



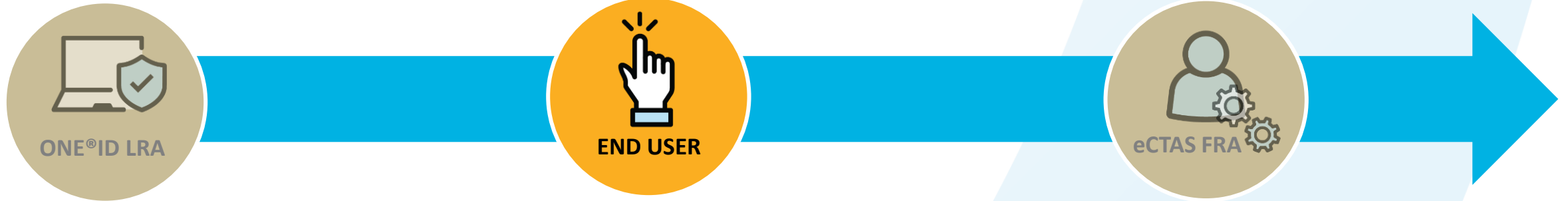
Note: This table and the eCTAS Environment URLs can be found in the [Online Help](#)

Access the HL7 Message Viewer



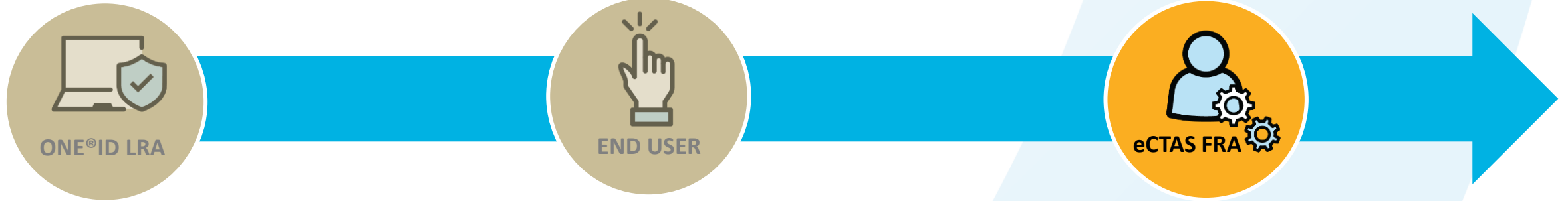
- Your facility's Local Registration Authority (LRA) creates and/or updates user's ONE® ID account (i.e., enrolls them to the eCTAS service)

Access the HL7 Message Viewer



- Complete ONE®ID related activities (if applicable)
- Log into the Administration Console for both environments (Production & Conformance)
- Read and acknowledge the End User License Agreement (EULA)

Access the HL7 Message Viewer



- Your eCTAS Facility Role Administrator (FRA) assigns the site and role of 'Site Integration Administrator' for appropriate site(s)



Note: Site Integration Administrator role is best suited to be assigned to the eCTAS technical lead, eCTAS Coordinator and/or any other user that would benefit from having access to HL7 message viewer



Note: Depending on the size of your hospital, your hospital's LRA and FRA might be the same person

Follow your hospital's protocol

For resolving issues

- HL7 Message Viewer is a tool, not a solution
- Facilities are required to develop protocols for staff to understand their roles and responsibilities in resolving issues that have been identified using the HL7 Message Viewer
- Protocols may involve:
 - How to leverage the HL7 Message Viewer as a tool
 - How to resolve typical errors
 - Identifying resources that can be consulted when the error description is not intuitive or cannot be resolved



Note: Consult with eCTAS Coordinator & eCTAS Technical Lead first when having issues locating the source of the error



Note: If still unable to locate the source of the error, consult with your internal IT HelpDesk followed by generating a ticket with Ontario Health by sending an email to eCTAS@ontariohealth.ca

End of Section

- ✓ HL7 Message Viewer
- ✓ eCTAS Environments
- ✓ Access



Logging in and Navigation



Log in to access HL7 Message Viewer



Log into the **Administration Console** for the applicable environment


- Production (Live) 
<https://ectas-admin.ccohealth.ca>
- or
- Conformance (Training) 
<https://confectas-admin.ccohealth.ca>



Enter your ONE® ID Login ID and Password

Login ID
No need to add '@oneid.on.ca'

Password

Remember me 

Log in



If prompted, select a site

eCTAS  PRODUCTION Admin


Select your Hospital Site to continue to eCTAS

Select a site

Sign in to eCTAS Admin Portal



Select **HL7 Message Viewer**

eCTAS  PRODUCTION Admin

eCTAS Registration View

HL7 Message Viewer

Site Role Management

Site Level Extracts



Note: Google Chrome is the supported internet browser for eCTAS.

Navigation



Change Site

Link back to other Admin Console Features

- Site name
- Available Sites
- Time range and Advanced Search

Always Sign Out when not in use

eCTAS CONFORMANCE Administration Console Krush, Stephanie @ IMDA Training Team Site [Sign Out](#)

Message Status Summary

HL7 Message Viewer - IMDA Training Team Site Available Sites ▾ Show messages for last 1 Day ▾

MESSAGE STATUS SUMMARY			
MSG TYPE \ COUNT	SENDING	DELIVERED	FAILED
ADT-04 [4]	-	4	-
ORU (T) [5]	3	2	-
ORU (R) [0]	-	-	-
ADT-02 [3]	-	3	-
ADT-05 [7]	-	5	2
ADT-08 [0]	-	-	-
TOTAL	3	14	2

Messages Grouped by Patient Visit

MESSAGES GROUPED BY PATIENT VISIT			
Event Date/Time	Patient Visit	Processing Status	Delivery Status
Today 08:01 - 08:14	Zoe, Zelda (eCTAS ID:17103) 2-Feb-24	SUCCESSFUL	
Today 08:15 - 08:15	Sloe, Sara (eCTAS ID:0) 2-Feb-24	FAILED	
Today 08:19 - 08:33	Floe, Felix (eCTAS ID:17097) 2-Feb-24	WAITING	(Inb ToA)
Today 08:27 - 08:38	Doe, Jane (eCTAS ID:17099) 2-Feb-24	SUCCESSFUL	
Today 08:39 - 08:52	Roe, Reese (eCTAS ID:17100) 2-Feb-24	SUCCESSFUL	
Today 09:11 - 09:11	Koe, Kelly (eCTAS ID:0) 2-Feb-24	FAILED	
Today 09:50 - 09:55	Toe, Terry (eCTAS ID:17102) 2-Feb-24	WAITING	(Inb Reg Inb ToA)

End of Section




- ✓ Logging in
- ✓ Navigating HL7 Message Viewer



Message Status Summary



Message Status Summary

- Shows a count for each message type by status
- Helps you identify where issues may be occurring at a glance




eCTAS CONFORMANCE Administration Console Krush, Stephanie @ IMDA Training Team Site    Sign Out



HL7 Message Viewer - IMDA Training Team Site Available Sites ▾ Show messages for last 1 Day ▾  

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ADT-05 [7]	-	5	2
ADT-08 [0]	-	-	-
TOTAL	3	14	2

Message Type Statuses

DEMO

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HL7 Message Viewer - IMDA Training Team Site Available Sites ▾ Show messages for last 1 Day ▾  

MESSAGE STATUS SUMMARY			
MSG TYPE \ COUNT	SENDING	DELIVERED	FAILED
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ORU (R) [0]	-	-	-
ADT-02 [3]	-	3	-
ADT-05 [7]	-	5	2
ADT-08 [0]	-	-	-
TOTAL	3	14	2

Sending is a count of outbound messages that are in progress

Delivered is a count of messages that have been successfully processed (inbound) or received (outbound)










Failed is a count of messages that could not be processed (inbound) or created (outbound)

Messages Grouped by Patient Visit



Messages Grouped by Patient Visit: Rows

- Allows you to review and investigate messages in greater detail
- Each row in the table represents a single 'Patient Visit'
- Clicking on a 'Patient Visit' row will expand the related 'Event' row(s)
- The Patient Visit row represents the full patient visit from beginning to end comprised of all Event row(s) associated to it

MESSAGES GROUPED BY PATIENT VISIT			
Event Date/Time	Patient Visit	Processing Status	Delivery Status
Today 08:01 - 08:14	 Zoe, Zelda (eCTAS ID:17103) 2-Feb-24	SUCCESSFUL	
Today 08:01	ADT-A05 Inbound Pre-Triage/Receiving	 Successful	 Delivered
Today 08:10	ORU-R01 Outbound Triage Assessment	 Successful	 Sending
Today 08:13	ADT-A04 Inbound Registration	 Successful	 Delivered
Today 08:14	ADT-A02 Inbound Transfer of Accountability	 Successful	 Delivered

'Patient Visit' row

'Event' row(s)

Messages Grouped by Patient Visit: Columns

1. Event Date/Time

2. Patient Visit






- A patient visit row displays the Patient Name, eCTAS ID, and Date initiated
- An event row displays the Type, Direction, and eCTAS Function

3. Processing Status (Sending System)

- A patient visit can be Failed, Waiting or Successful
- An event may be Successful or Failed

4. Delivery Status (Receiving System)

- A patient visit may display Direction and eCTAS Function of Waiting messages e.g. (Inb Reg|Out Tri|Inb ToA)
- An event can be Sending, Processing or Delivered

MESSAGES GROUPED BY PATIENT VISIT			
Event Date/Time	Patient Visit	Processing Status	Delivery Status
2-Feb 08:01 - 2-Feb 08:14	 Zoe, Zelda (eCTAS ID:17103) 2-Feb-24	SUCCESSFUL	
2-Feb 08:15 - 2-Feb 08:15	 Sloe, Sara (eCTAS ID:0) 2-Feb-24	FAILED	
2-Feb 08:19 - 2-Feb 08:33	 Floe, Felix (eCTAS ID:17097) 2-Feb-24	WAITING	(Inb ToA)
2-Feb 08:19	ADT-A05 Inbound Pre-Triage/Receiving	 Successful	 Delivered

Processing Status

Successful

Every event type that should normally occur for an ED visit has been completed and successfully processed.

Waiting

A **registration, triage, or transfer of accountability** that is expected to be transmitted has not yet occurred.

Failed

One or more messages for a particular ED visit have not been processed due to a specific error.

Event Details Dialog

- Type
- Direction
- Received Date/Time
- eCTAS Function
- Processing Status
- Delivery Status
- Errors
- Message received (in pipe delineated format)
- Errors and Warnings

Processing ID 24352 | Delivery ID 25383 | Inbound | Site: IMDA Training Team Site ✕

Type: ADTA05
Direction: Inbound
Received Date/Time: Today 04:37
eCTAS Function: Pre-Triage/Receiving

Processing Status: Failed
Delivery Status: Processing
Errors: Yes

Message received

```
MSH|^~\&|HIS_REALTIME|4197|eCTAS_REALTIME||20211026142500||ADT^A04|MSG-20180828-145904-74084|T|2.5
EVN|A04|20211026142500||REC|Ectasuser1@cancercareqa.on.ca^user1^Ectas^^^^^^^^^^^^^^^^^^^^Nurse
PID|1||1234555555^^^4197^MR~1234567890^^^CANON^HC||Smoketest^Sue||20211011|F
PV1|1|E|TRG|E|||||||||||||211026-2|||||||||||||||||20211026142500|||||
PV2|||||||||||||||||||||F||
```

Errors (1) | Warnings (0) | Total (1)

Type	Code	Description
Error	88888	20300 - Mode of Arrival can only one of the following values: Walk-in, EMS, Police, Air.

Close

Event Details Dialog

DEMO



At Triage: A nurse receives a patient in their HIS (for example Meditech), but the patient is not showing up on the pre-triaged patient's queue.



To Get to the Error Source: Find the patient and review Event Details Dialog

End of Section

- ✓ Message Status Summary
- ✓ Messages Grouped by Patient Visit
- ✓ Event Details Dialog

Troubleshooting and Best Practices

Triage Data Not Appearing in HIS

DEMO



At Triage: Nurse has triaged a patient in eCTAS, but is not seeing data in HIS.



To Get to the Error Source: Locate the message that is failing then check what the 'Processing' and 'Delivery' status of the message is.

Patients Not Being Moved to TOA Queue

DEMO



At Triage: Several Triage Nurses report that although they are initiating Transfer of Accountability (TOA) in their HIS, the associated patient records are not being cleared from the Triage Patient Queue in eCTAS.




In the HL7 Message Viewer: The count of ADT-A08/A02 (Update Event or TOA) messages are unusually low compared to the ORU (T) (Triage Assessment) message.



To Get to the Error Source: Locate the associated Patient Visits, check if there is a part of the interface that's down

Best Practices

- Have your HL7 Message Viewer Resources participate in Conformance Testing
- Ensure they are assigned to the role of Site Integration Administrator for each applicable Site
- Have a backup Site Integration Administrator
- Know your site's workflow and refer to the [eCTAS Online Help](#) and [HL7 Specification Appendices](#)
- Use the  button in the HL7 Message Viewer if message content is missing from Event Details dialog
- Choose the appropriate time range for optimal data display
- The HL7 Message Viewer for your Production (Live) Environment will contain PHI. Follow your hospital's policies and always sign out when not in use
- Never add live patient data to Conformance (Training) Environment as this would result in a privacy breach

End of Section


- ✓ Troubleshooting
- ✓ Best Practices

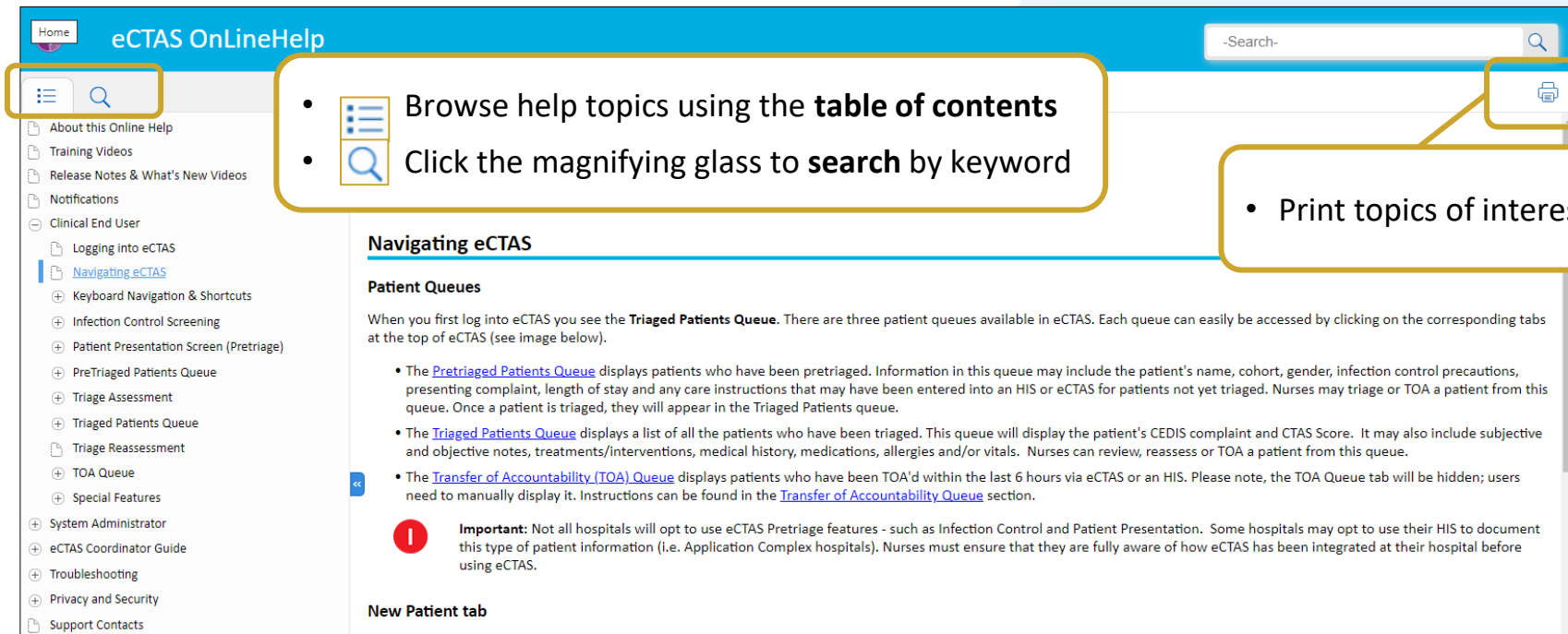
Resources



eCTAS Online Help

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- Click on the question mark icon  from within the Administration Console
- Visit the **eCTAS Online Help** URL: <https://help.accesstocare.on.ca/helpfiles/eCTASOnlineHelp>



The screenshot shows the eCTAS OnLineHelp website. The left sidebar contains a table of contents with items like 'About this Online Help', 'Training Videos', 'Clinical End User', and 'System Administrator'. The main content area is titled 'Navigating eCTAS' and discusses 'Patient Queues'. Three callout boxes highlight specific features: a magnifying glass icon for searching, a list icon for the table of contents, and a print icon for printing topics.

- Browse help topics using the **table of contents**
- Click the magnifying glass to **search** by keyword
- Print topics of interest

Questions?



We are happy to answer your questions



Thank you