



# The Holding Queue for Script

Welcome to American Data CARES, the online resource for all your ECS needs. This handout may be read independently or in conjunction with the corresponding video *[The Holding Queue for Script](#)* in our American Data CARES library. This handout covers *[how the Holding Queue functionality is a part of the Script interface](#)*. If after reviewing this material, you need further assistance, please contact [cares@american-data.com](mailto:cares@american-data.com) or 800-464-9942.

## What is the Holding Queue?

The Script interface is electronic communication between facility and pharmacy. With this being said, ECS developed message matching logic to facilitate safe and efficient message matching. There are times when ECS does not obtain enough information from the pharmacy message to safely match it. In these instances ECS routes the message to the Holding Queue where a person must manually match the message for ECS to process it. American Data recommends creating a policy and procedure for monitoring the Holding Queue. Typically a nurse manager or the Director of Nursing monitors this. If there are significant messages being routed to the Holding Queue staff workflow at the pharmacy and facility should be reviewed.

## Why Doesn't the Message Match?

Each message coming into ECS from pharmacy runs through two independent matching logics: client matching and order matching. This assures the messages are being accurately matched.

### Client Matching

Client matching in ECS follows two logic paths. The primary matching logic uses the ECS Client ID. This number is sent from ECS to pharmacy in all messages. The location of this number in the electronic message is the 'MedicalRecordIdentificationNumberEHR'. This can cause confusion between pharmacy and facility as the pharmacy may refer to this as the MRN. With an understanding of where to find this number in ECS (e.g. it is not the ECS client MRN) confusion can be cleared.

If pharmacy sends a message with a 'MedicalRecordIdentificationNumberEHR' (ECS client ID) that does not match any in ECS, ECS looks at the client's demographic information to match the message. Demographic information includes name, date of birth, social security number, and gender. If any of these items do NOT match exactly, the message is routed to the Holding Queue for manual remediation.

Primary Matching	Secondary Matching
MedicalRecordIdentificationNumberEHR (ECS client ID)	Client Demographics (Name, DOB, SSN, Gender)

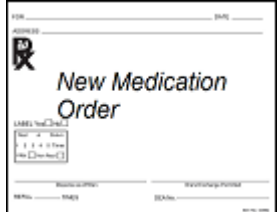

## Order Matching

Primary Matching	Secondary Matching	Tertiary Matching
PrescriberOrderNumber (PON)	RelatesToMessageID (RTMID)	RxReferenceNumber (RxRef)

Order matching logic in ECS uses three specific numbers typically sent in electronic messages. The primary matching logic uses the PrescriberOrderNumber or PON. This number originates in ECS with the new medication order. When a message from pharmacy includes a PON that does not match to a PON in ECS the message is routed to the Holding Queue. Alternately, if the pharmacy message does not contain a PON ECS matches based on the second number in the logic.

Each electronic message is required to have a unique message identification number (MID). With medication orders, a new order has a unique MID and the fill message from pharmacy has a unique MID. To link these two messages together, the RelatesToMessageID (RTMID) is utilized.

### Example

New Medication Order (MID=123)	Fill Message (MID=333) (RTMID=123)
	

If the RTMID of a message pharmacy sends does not match to a MID in ECS, the order is routed to the Holding Queue for manual remediation. Alternately, if the pharmacy message does not contain a RTMID ECS matches based on the third number in the logic.

The third and final number used for automated order matching is the RxReferenceNumber. This number originates at the pharmacy for each new order. If the RxReferenceNumber does not match any in ECS the order is routed to the Holding Queue for manual remediation.

## Typical Holding Queue Instance

When pharmacy and facility workflow are coordinated and pharmacy software allow for manual entry of PON all messages are expected to match in ECS.

With that being said, not all pharmacy vendors allow for the manual entry of PONs. When this is the case, American Data expects one type of message to be consistently routed to the Holding Queue – the initial fill for a new narcotic medication order. The first time pharmacy fills a new narcotic order, ECS does not receive the numbers required to automatically match the message. After this initial fill is manually remediated all subsequent fill messages for this order are expected to automatically match based on the Rx Reference Number.

If your facility finds several messages routed to the Holding Queue the facility and pharmacy workflows should be reviewed to identify the cause and remediate if possible.

## The Holding Queue in ECS

In ECS a button was created on the Physician Orders Access Screen for nurses to have quick access to this feature.

### Physician Orders Access Screen

Physician Orders	New Orders					Chart Review	Reports
Nurse Menu	Allergies	Diet/Supplements	Nursing Orders	Supportive Devices	Side Effects	View/Edit Current Orders	Print Physician Orders
	Blood Glucose Checks	Lab/Xray	Orders Continuation	Therapy	Psychotropic Med Monitoring	View/Edit Held Orders	Print MAR
	Code Status	Life Activity/ FYI	Protocols/ Vaccines	Transfers/ Discharges		View Current/DC'd Orders	Print TAR
	Consults	Medications	Standing Orders	Treatments		For E-Prescribing	Print Daily Telephone Orders
						Census Requirements	
						Script Holding Queue	
						Red Rx (eMAR) Review	

The Holding Queue has filters available at the top. Defaults are set to provide users with the most helpful filters for most instances. If a need for troubleshooting arises, users may find the other filter options helpful. The bottom portion of the screen displays the messages that require manual matching. The status column displays what type of matching is required for the message: client or order.

### Script Holding Queue in ECS

Written Date	Client Name	Drug Description	Status
2015-11-25	Zirbel, Brooke	Morphine Sulfate 15MG Tablet	Order
2015-12-03	Peppermint, Patricia	Atenolol 100MG Tablet	Client

## Client Matching

ECS presents the client selection screen when the electronic message requires manual client matching. Choose the appropriate client and select OK. The message is released from the Holding Queue and linked to the client account.

**NOTE: The demographic data in ECS does NOT update from the incoming pharmacy message. Review the message to determine why the client did not match to determine which system requires updating (pharmacy or facility).**

## Order Matching

When a message requires *Order Matching* ECS presents a list of the electronic orders associated with the client. Notice the order list includes both active and inactive medications. This is needed because pharmacy may send messages for medications that have been discontinued. Click the column to sort the list.

### Order Matching Screen

**Rx Fill**

**Morphine Sulfate 15MG Tablet(1 tablet / 15mg) by mouth at bedtime prn Moderate to Severe Chronic Pain GIVEN FOR: ICD: G89.2, Note: Swapped brand**

Pharmacy: INTEGRATION PHARM - AmData  
2828 Main Street, Prairie Du Sac WI, 53578  
TEL: 8557939773  
FAX: 8774504447

Prescriber: Adrian T. Booker MD  
1234 Ward Parkway, Prairie Du Sac WI, 53578  
TEL: 8557939773

Prescriber Order Number:  
RX Reference Number: M5EIII

Show XML

Entry	Entry Date	Status	User
Amoxicillin 500MG Tablet Dose: (1 tablet / 500mg) by mouth twice per day 0700 1900 Through: 11/20/2015 For: Anthrax	11/16/2015	Discontinued	CJZ
Magic Mouthwash Dose: (2 application) by mouth daily 1700 x 1 days For: Halitosis	11/30/2015	Discontinued	CJZ
[Tums]Calcium Carbonate Antacid 500MG Tablet Chewable Dose: (1 tablet / 500mg) by mouth twice per day 0700 1900 For: Dyspepsia	11/16/2015	Active	CJZ
narcotic Dose: (1 tablet) by mouth daily 1600 For: Pain	11/25/2015	Active	CJZ
Amoxicillin 500MG Tablet Dose: (1 tablet / 500mg) by mouth twice per day 0700 1900 Through: 11/16/2015 For: Anthrax	11/12/2015	Active	CJZ
[Zithromax]Azithromycin 250MG Tablet Dose: (1 tablet / 250mg) by mouth daily 2300 x 4 days For: Acute Otitis Media	11/12/2015	Active	CJZ
[Tylenol]Acetaminophen 325MG Tablet Dose: (2 tablet / 650mg) by mouth every 8 hours as needed For: Fever	11/30/2015	Active	CJZ
Furosemide 20MG Tablet Dose: (1 tablet / 20mg) by mouth twice per day 0700 1500 For: Edema	12/1/2015	Active	CJZ
[Lantus]Insulin Glargine 100UNIT/ML Solution Dose: (variable dose) sub-Q daily 2000 For: Type 2 Diabetes Mellitus (Non-Insulin-Dependent Diabetes) SS Insulin Directions: < 60 = instate hypoglycemic protocol 61-150 = 0 units 151-200 = 2 units 201-250 = 4 units 251-300 = 6 units 301-350 = 8 units 351-400 = 10 units 401-450 = 12 units 451-500 = 14 units 501-550 = 16 units 551-600 = 18 units 601-650 = 20 units 651-700 = 22 units 701-750 = 24 units 751-800 = 26 units 801-850 = 28 units 851-900 = 30 units 901-950 = 32 units 951-1000 = 34 units	11/25/2015	Active	CJZ
Magic Mouthwash Dose: (1 mg) by mouth daily 1900 For: Halitosis	11/25/2015	Active	CJZ

OK Cancel

To assist staff with order matching, orders with the same ingredients as the pharmacy message are bolded in the list. You are not required to select one of these orders.

### Order Matching Screen

**Rx Fill**

**Morphine Sulfate 15MG Tablet(1 tablet / 15mg) by mouth at bedtime prn Moderate to Severe Chronic Pain GIVEN FOR: ICD: G89.2, Note: Swapped brand**

Pharmacy: INTEGRATION PHARM - AmData  
2828 Main Street, Prairie Du Sac WI, 53578  
TEL: 8557939773  
FAX: 8774504447

Prescriber: Adrian T. Booker MD  
1234 Ward Parkway, Prairie Du Sac WI, 53578  
TEL: 8557939773

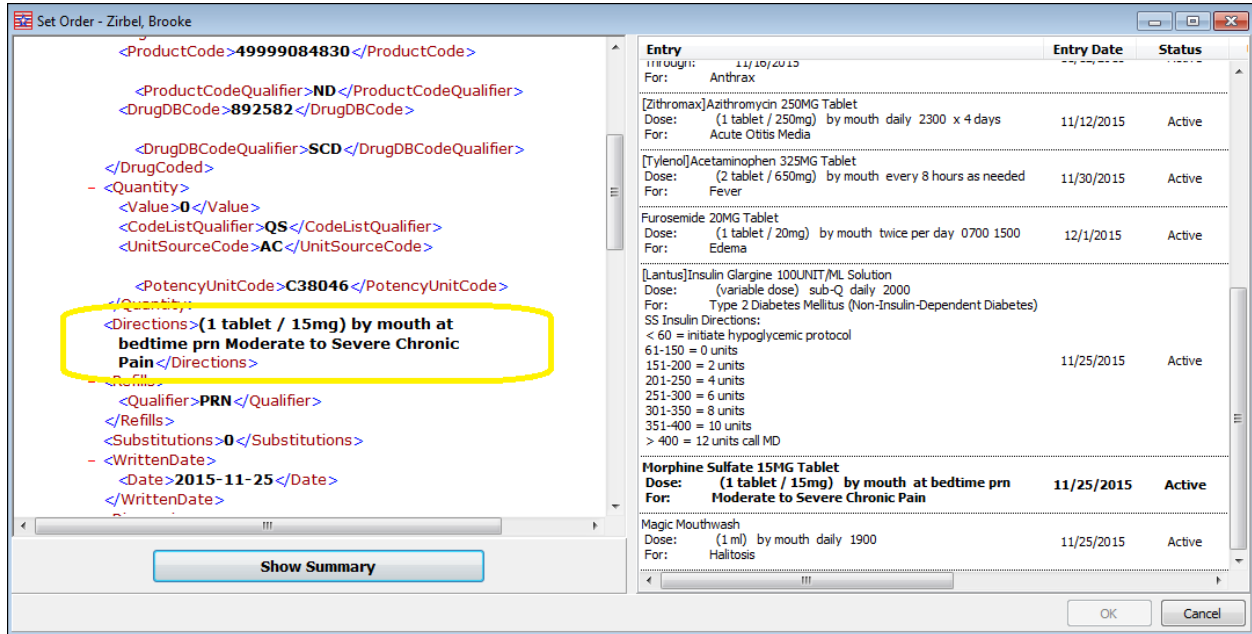
Prescriber Order Number:  
RX Reference Number: M5EIII

Show XML

Entry	Entry Date	Status	User
[Zithromax]Azithromycin 250MG Tablet Dose: (1 tablet / 250mg) by mouth daily 2300 x 4 days For: Acute Otitis Media	11/12/2015	Active	CJZ
[Tylenol]Acetaminophen 325MG Tablet Dose: (2 tablet / 650mg) by mouth every 8 hours as needed For: Fever	11/30/2015	Active	CJZ
Furosemide 20MG Tablet Dose: (1 tablet / 20mg) by mouth twice per day 0700 1500 For: Edema	12/1/2015	Active	CJZ
[Lantus]Insulin Glargine 100UNIT/ML Solution Dose: (variable dose) sub-Q daily 2000 For: Type 2 Diabetes Mellitus (Non-Insulin-Dependent Diabetes) SS Insulin Directions: < 60 = instate hypoglycemic protocol 61-150 = 0 units 151-200 = 2 units 201-250 = 4 units 251-300 = 6 units 301-350 = 8 units 351-400 = 10 units 401-450 = 12 units 451-500 = 14 units 501-550 = 16 units 551-600 = 18 units 601-650 = 20 units 651-700 = 22 units 701-750 = 24 units 751-800 = 26 units 801-850 = 28 units 851-900 = 30 units 901-950 = 32 units 951-1000 = 34 units	11/25/2015	Active	CJZ
<b>Morphine Sulfate 15MG Tablet Dose: (1 tablet / 15mg) by mouth at bedtime prn Moderate to Severe Chronic Pain</b>	<b>11/25/2015</b>	<b>Active</b>	<b>CJZ</b>
Magic Mouthwash Dose: (1 mg) by mouth daily 1900 For: Halitosis	11/25/2015	Active	CJZ

OK Cancel

There may be times when you need more information than what the summary screen provides to accurately match the message from pharmacy. Click the button to switch to the xml view to see detailed information pertaining to the order. The most helpful location to look is the <Directions> element towards the bottom of the xml. To manually match an order, select it on the right and click OK.



The screenshot shows a software interface for setting an order. On the left, XML data is displayed for a prescription. A yellow box highlights the following XML element:

```
<Directions>(1 tablet / 15mg) by mouth at bedtime prn Moderate to Severe Chronic Pain</Directions>
```

On the right, a table lists medication entries with their respective dates and statuses:

Entry	Entry Date	Status
[Zithromax]Azithromycin 250MG Tablet Dose: (1 tablet / 250mg) by mouth daily 2300 x 4 days For: Acute Otitis Media	11/12/2015	Active
[Tylenol]Acetaminophen 325MG Tablet Dose: (2 tablet / 650mg) by mouth every 8 hours as needed For: Fever	11/30/2015	Active
Furosemide 20MG Tablet Dose: (1 tablet / 20mg) by mouth twice per day 0700 1500 For: Edema	12/1/2015	Active
[Lantus]Insulin Glargine 100UNIT/ML Solution Dose: (variable dose) sub-Q daily 2000 For: Type 2 Diabetes Mellitus (Non-Insulin-Dependent Diabetes) SS Insulin Directions: < 60 = initiate hypoglycemic protocol 61-150 = 0 units 151-200 = 2 units 201-250 = 4 units 251-300 = 6 units 301-350 = 8 units 351-400 = 10 units > 400 = 12 units call MD	11/25/2015	Active
Morphine Sulfate 15MG Tablet Dose: (1 tablet / 15mg) by mouth at bedtime prn For: Moderate to Severe Chronic Pain	11/25/2015	Active
Magic Mouthwash Dose: (1 ml) by mouth daily 1900 For: Halitosis	11/25/2015	Active

## Conclusion

The Script interface streamlines communication between facility and pharmacy. American Data developed workflows to assist staff with this new functionality. If you have questions or concerns please contact the clinical department at [clinical@american-data.com](mailto:clinical@american-data.com) or (800) 464-9942.

Thank you for taking the time to learn more about *The Holding Queue for Script*. Please check out our other videos and documentation for more great information about ECS!