

The Holding Queue for Script

What is the Holding Queue?

The Script interface is electronic communication between facility and pharmacy. 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. Someone should be monitoring the Holding Queue daily. 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. 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 the Holding Queue.

Physician Orders Access Screen

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


The Holding Queue has filters available at the top such as written date, client name, description, etc. 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. Put a check in the other filters to see that information. 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

1. Select a message with the status of "Client".
2. Right click and select Set Client, or click the Set Client button at the top of the screen.
3. The client selection screen will appear. Choose the appropriate client and select OK.
4. The message will be released from the Holding Queue and linked to the client account if the order doesn't need to be matched. If the message remains in the holding queue, the status will change to "Order" which signifies the order also needs to be matched.

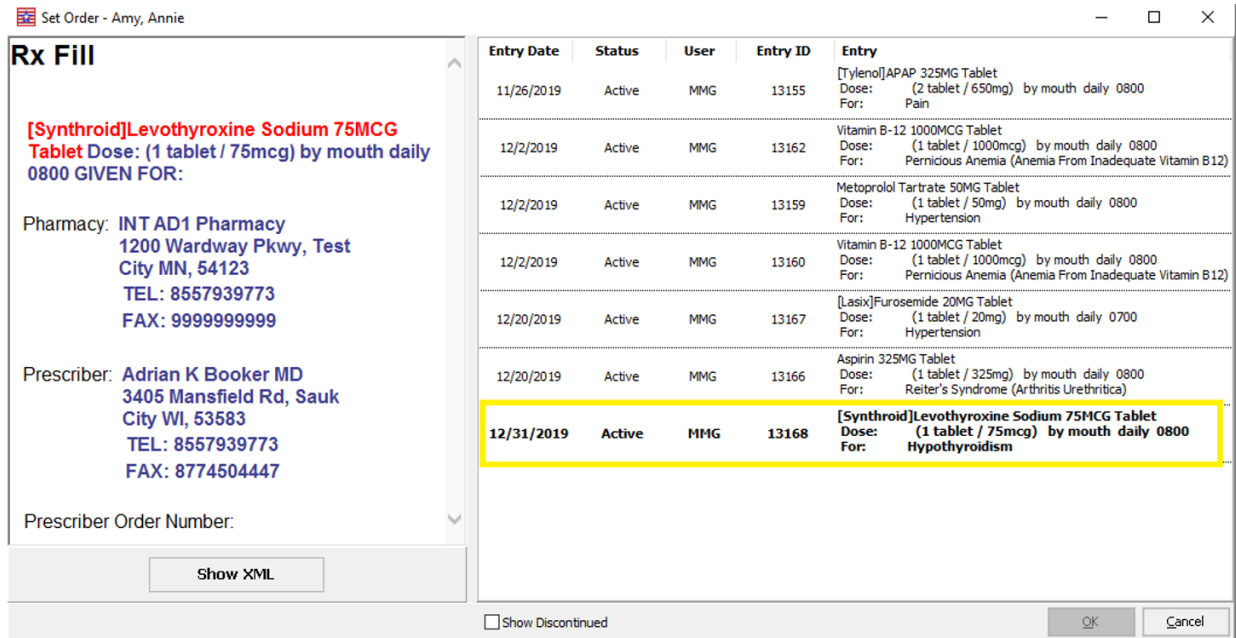
 **NOTE:** The demographic data in ECS does NOT update from the incoming pharmacy message. Review the message to determine why the client did not match to determine which system requires updating (pharmacy or facility).

Order Matching

1. Select a message with the status of "Order".
2. Right click and select Set Order or click the Set Order button at the top of the screen.
3. The Set Order screen will appear.
 - a. The left side of the screen displays the RxFill message the pharmacy sent with the medication displayed.
 - b. The right side of the screen displays all the active medication orders.
 - c. Only orders with an Rx symbol in the upper left corner on the MAR will show in this list.
 - d. Click on the column headings (Entry Date, Status, Entry) to sort the columns if needed.
 - e. 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.

- f. Click "Show Discontinued" at the bottom of the screen to show discontinued orders if needed.

Order Matching Screen



The screenshot shows a window titled "Set Order - Amy, Annie". On the left is a "Rx Fill" panel with the following information:

[Synthroid]Levothyroxine Sodium 75MCG Tablet
Dose: (1 tablet / 75mcg) by mouth daily 0800 GIVEN FOR:

Pharmacy: INT AD1 Pharmacy
 1200 Wardway Pkwy, Test
 City MN, 54123
 TEL: 8557939773
 FAX: 9999999999

Prescriber: Adrian K Booker MD
 3405 Mansfield Rd, Sauk
 City WI, 53583
 TEL: 8557939773
 FAX: 8774504447

Prescriber Order Number:

At the bottom of the Rx Fill panel is a "Show XML" button.

On the right is a table of medication orders:

Entry Date	Status	User	Entry ID	Entry
11/26/2019	Active	MMG	13155	[Tylenol]APAP 325MG Tablet Dose: (2 tablet / 650mg) by mouth daily 0800 For: Pain
12/2/2019	Active	MMG	13162	Vitamin B-12 1000MCG Tablet Dose: (1 tablet / 1000mcg) by mouth daily 0800 For: Pernicious Anemia (Anemia From Inadequate Vitamin B12)
12/2/2019	Active	MMG	13159	Metoprolol Tartrate 50MG Tablet Dose: (1 tablet / 50mg) by mouth daily 0800 For: Hypertension
12/2/2019	Active	MMG	13160	Vitamin B-12 1000MCG Tablet Dose: (1 tablet / 1000mcg) by mouth daily 0800 For: Pernicious Anemia (Anemia From Inadequate Vitamin B12)
12/20/2019	Active	MMG	13167	[Lasix]Furosemide 20MG Tablet Dose: (1 tablet / 20mg) by mouth daily 0700 For: Hypertension
12/20/2019	Active	MMG	13166	Aspirin 325MG Tablet Dose: (1 tablet / 325mg) by mouth daily 0800 For: Reiter's Syndrome (Arthritis Urethritica)
12/31/2019	Active	MMG	13168	[Synthroid]Levothyroxine Sodium 75MCG Tablet Dose: (1 tablet / 75mcg) by mouth daily 0800 For: Hypothyroidism

At the bottom of the window is a "Show Discontinued" checkbox and "OK" and "Cancel" buttons.

4. Select the appropriate order entry on the right side and click OK.
5. The message will be released from the Holding Queue and linked to the client's medication record.

There may be times when more information is needed to accurately match the message from pharmacy. Click the Show XML button to switch to the xml view of the message. The XML shows more detailed information pertaining to the order. The most helpful location to look is the <SigText> element towards the bottom of the xml. Specifically look for <MedicationPrescribed>, and look a little further down from that to see the <SigText> that was sent from ECS to pharmacy. Those directions should match the directions of the order being matched on the right side of the screen.

Order Matching Screen

Set Order - Amy, Annie

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</ClinicalInformationQualifier>1</ClinicalInformation
- <Primary>
  <Code>E039</Code>
  <Qualifier>ABF</Qualifier>
  <Description>Hypothyroidism,
  unspecified</Description>
</Primary>
</Diagnosis>
- <Sig>
  <SigText>(1 tablet / 75mcg) by
  mouth daily 0800</SigText>
- <CodeSystem>
  <SNOMEDVersion>20160901</SNOMEDVersion>
  <FMTVersion>16.03d</FMTVersion>
</CodeSystem>
- <Instruction>
  - <DoseAdministration>
  - <DoseDeliveryMethod>
    <Text>Take</Text>
  <Qualifier>SNOMED</Qualifier>

```

Show Summary

Entry Date	Status	User	Entry ID	Entry
11/26/2019	Active	MMG	13155	[Tylenol]APAP 325MG Tablet Dose: (2 tablet / 650mg) by mouth daily 0800 For: Pain
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Show Discontinued
 OK
Cancel