IBM Cúram Social Program Management

Cúram Evidence Broker Guide

Version 6.0.4

Note

Before using this information and the product it supports, read the information in Notices at the back of this guide.

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Chapter 1

Introduction

1.1 Purpose

The purpose of this guide is to introduce evidence sharing and the Cúram Evidence Broker™ and to provide an overview of using the Cúram Evidence Broker to share evidence.

1.2 Audience

This guide is intended for any reader interested in understanding the business concepts of evidence sharing and the Cúram Evidence Broker.

1.3 Prerequisites

The `Cúram Temporal Evidence Guide` is a reading prerequisite as the Cúram Evidence Broker integrates with Cúram Temporal Evidence.

1.4 Chapters in this Guide

The following list describes the chapters and appendix within this guide:

Introducing Evidence Sharing and the Evidence Broker

> This chapter introduces the concepts of evidence sharing and provides an overview of the functionality handled by the Cúram Evidence Broker.

Configuring the Evidence Broker

> This chapter describes the administration components which must be configured to support evidence sharing. This includes the setting up of evidence sharing for cases and evidence types; configuring the relationship between the source and target evidence and case types must also be

configured.

Using the Evidence Broker

This chapter describes the best practices for using the Cúram Evidence Broker to share evidence.

Evidence Sharing Business Scenarios

This appendix provides three simple business scenarios to demonstrate evidence sharing: one demonstrating the manual acceptance of identical evidence, the second demonstrating the automatic acceptance of identical evidence, and the third demonstrating non-identical evidence sharing.

Chapter 2

Introducing Evidence Sharing and the Evidence Broker

2.1 What Is Evidence Sharing?

Technology has revolutionized the way information is accessed and shared. Most businesses have changed the way they operate to benefit from information sharing and consumers have come to expect business to operate in a more efficient fashion now that information is readily available. For example, when consumers re-purchase, they expect their existing information to be available for re-use; when mortgage lenders investigate clients, they can access a credit history across other financial institutions.

In principle, evidence sharing is the ability for SEM agencies to share evidence about their clients with other agencies and across systems. Historically, SEM agencies have tended to deliver single programs and thus have operated in isolation of other agencies delivering different programs. Clients would have to provide the same evidence about themselves and their family members multiple times. Any evidence changes, such as a change in address, would need to be communicated by the client to the various agencies working with the client. The principle of evidence sharing is widely accepted by SEM agencies. SEM agencies understand that clients do not want to have to fill out the same information repeatedly for different programs and that all associated agencies should be informed when client information changes.

Most SEM agencies recognize the complexities involved in implementing any level of evidence sharing. There are some SEM agencies who want to collect information once and make sure it is reflected across all programs and agencies automatically. Other SEM agencies are not ready to accept sharing at that level. These agencies may want to be made aware of changes to evidence on other programs and agencies, but still be able to decide whether or not to take on the new evidence. There is also the complexity of finding common ground in the evidence captured across agencies and pro-

grams. Though agencies are likely to capture similar information, they may not capture that information in identical formats. Any solution which supports evidence sharing has to take into account the different needs and concerns of SEM agencies.

2.2 What Is the Evidence Broker?

The Cúram Evidence Broker provides a flexible approach to evidence sharing. SEM agencies can configure how they share evidence with other agencies in one way, and configure how they receive broadcasted evidence from other agencies in a completely different way. SEM agencies can define the rules of evidence sharing per evidence type and per case type. The main features of the Cúram Evidence Broker are as follows:

- The evidence broker recognizes the difference between sharing identical and non-identical evidence. For identical evidence, the same evidence type is shared between a source and target case. For non-identical evidence, the source evidence type is different from the target evidence type.

- Evidence sharing is fully configurable with separate configuration processes for identical and non-identical evidence.

- Once configured for sharing, identical evidence is broadcast to cases, where it can be automatically or manually accepted. Identical evidence can also be rejected.

- Evidence from different sources can be compared to existing evidence so that a caseworker can make an informed decision as to whether or not to accept it.

- The evidence broker recognizes that evidence can be shared at various stages in its lifecycle (i.e. new, updated and removed evidence) and likewise can be merged in with evidence at various stages in its lifecycle, and therefore provides the necessary business validations to cater for this and to preserve the integrity of the evidence workflow on both source and target cases.

- The evidence broker allows the user to process incoming evidence one by one, e.g. if the user needs to compare against existing evidence on the case, but also allows a user to process incoming evidence in bulk mode; accepting or rejecting all incoming evidence.

2.3 How Does the Evidence Broker Work?

The evidence broker's main function is to mediate the sharing of evidence across cases. It acts as both a receiver and a broadcaster of evidence. Source evidence on a source case is configured to share with target evidence on a target case. Once source evidence is activated, it is broadcast to the target case. One of the configuration options in Evidence Broker is to specify

whether evidence is automatically accepted onto the target case or manually worked on by a user. Broadcasted evidence configured for manual follow-up is available on the target case as incoming evidence, which the user must action appropriately. A user can compare the incoming evidence to existing evidence on the target case and make informed decisions on whether to accept or reject the incoming evidence. Alternatively, the evidence broker can be configured to automatically accept broadcasted evidence, which removes the need for the caseworker to make these decisions.

2.3.1 Broadcasting Evidence from Source to Target

The evidence broker is configured to broadcast new, updated, and removed evidence from source evidence types on source cases to target evidence types on target cases. For example, income evidence from one product delivery case type can be shared with income evidence in another product delivery case type. Evidence sharing is uni-directional and per evidence type. This means that different case types can be configured to receive and share each evidence type in different ways. If required, one case type might be able to receive shared evidence, but not be able to share its own evidence.

There are two categories of evidence sharing, identical evidence sharing and non-identical evidence sharing, each of which is configured separately. Evidence is identical when the source and target have the same categories of information and are effectively the same evidence. An example of identical evidence is pregnancy evidence; the same information is likely to be recorded for pregnant women across different case types. For non-identical evidence, the source and target evidence will be two different evidence types with some common categories of information. Income evidence types are good examples of non-identical evidence, such as trust income. While two case types will share the name of the trustee and the trust amount, there may be additional aspects of trust income maintained for a specific case type, but not for other case types. When the evidence broker broadcasts evidence available for sharing, it separates identical evidence from non-identical evidence. Identical evidence can be fully shared whereas non-identical evidence cannot.

Each broadcasted evidence record has an associated event which reflects the latest action performed on the source evidence resulting in the evidence being broadcast. The evidence broker reflects the event so that caseworkers can see the sequence of evidence updates applied to the same piece of evidence. By examining the sequence of events on the broadcasted evidence, case workers can decide the order in which to process it. For example, a new evidence record which has been subsequently removed on the source case may not be relevant to the target case. The caseworker can therefore decide not to accept the broadcasted new evidence record since it has subsequently been removed.

There are three main business functions which will trigger the evidence broker to broadcast evidence, each one described below:

- Any time a new person is added to a target case, the evidence broker will first check to see if that person is a member on any source cases. The evidence broker then checks for active evidence on the source case which concerns the new person and which is set up to be shared with the target case. This evidence is then broadcasted to the target case.

- Any time evidence changes are made to the source case and the evidence changes are for the same person who exists on both the source and target cases, the evidence broker will broadcast those changes to the target cases.

- Any time a new target case is created, the evidence broker will search for potential evidence to be shared from source cases. If found, the evidence broker will broadcast it.

2.3.2 Comparing Evidence

A user is informed that there is new incoming evidence by means of an informational on the evidence dashboard and also by a new task in their inbox. Once notified the user should open the incoming evidence list page which separates identical evidence from non-identical evidence. The user must work through this list in order to determine the appropriate action; review all the incoming evidence and compare it to existing evidence on the case as necessary

The comparison process works slightly differently depending on whether the evidence is identical or non-identical. For identical evidence, the evidence broker displays all previous evidence records of the same type for the same client. Like-for-like evidence is displayed in the same row so that the caseworker is better able to make a decision on whether or not to accept the incoming evidence.

For non-identical evidence records, the evidence broker displays evidence records which are of different types but are likely to affect current evidence of a particular type for a particular client. For example, income evidence from a source case would include employment details as would employment evidence for the target case. Both records are displayed on the comparison in order for the caseworker to determine how the source evidence affects the target evidence for the client.

2.3.3 Automatically Accepting Shared Evidence

The evidence broker can be configured to automatically accept identical evidence from each source evidence type and source case onto each target evidence type and target case. This saves the caseworker from having to manually synchronize incoming evidence.

When a new evidence record is shared (and automatically accepted), it is added to the list of in edit evidence; when an evidence update is shared (and automatically accepted), it is also added to the list of in edit evidence and the connection with the original record which has been changed is automat-

ically maintained by the system. The caseworker can then choose whether or not to activate the new evidence or evidence updates.

Shared evidence removals can also be automatically accepted. This results in either the pending removal indicator being set on an active evidence record or the discarding of an in edit evidence record.

As mentioned above, shared evidence that is automatically accepted does not require evidence synchronization. A task is assigned to the caseworker each time shared evidence is automatically accepted. The caseworker will still need to manually activate the shared evidence. This allows the caseworker to check that the shared evidence is correct, make any necessary changes, and run validations against the evidence before it is activated.

2.3.4 Manually Resolving Incoming Evidence

When automatically accepting evidence is not in use, either not configured for identical evidence or not applicable for non-identical evidence, then the user must review the incoming evidence list and decide how to action the evidence. Identical evidence can be accepted or rejected; either one at a time or in bulk mode. Non-identical evidence must be captured manually on the target case based on the incoming details (see Section 4.3.4, *Dismissing Non-Identical Evidence*), thereafter the user can dismiss the non-identical evidence from the incoming evidence list.

Rejecting evidence is a straightforward process. Once rejected, the broadcasted evidence is removed from the incoming evidence list. Accepting broadcasted evidence requires an understanding of evidence statuses and the logical order in which evidence updates should be processed. A set of rules will stop the caseworker from accepting evidence outside of this logical order. The following list summarizes the main logic to adhere to:

- When there is already a pending update on a target case, the evidence broker checks to see if the new update is related to the pending update and has the same effective date. If so, the incoming update cannot be accepted.

- When there is already a pending removal on the target case, the evidence broker checks to see if the new update is related to the pending removal and has the same effective date. If so, the incoming update cannot be accepted.

- An evidence removal cannot be accepted unless an active evidence record or in edit evidence record with the same effective date exists on the target case.

- An evidence removal cannot be accepted when there are active evidence records dependent on the active parent evidence record.

More information is provided on the evidence broker logic in Table 4.1, *Possible Evidence Sharing Scenarios based on Evidence Statuses* and Table 4.2, *Additional Validations Applied when Accepting Multiple Incoming*

Evidence Records.

Chapter 3

Configuring the Evidence Broker

3.1 Introduction

The configuration options for sharing evidence are available in the administration component. As part of setting up evidence sharing for cases, each case evidence type can be enabled to share its evidence. Once evidence sharing is configured at the case level, the relationship between the source and target evidence and case types must also be configured.

3.2 Enabling Evidence Broker Functionality

To use evidence sharing for product deliveries and integrated cases, the Evidence Broker functionality must first be enabled in the administration component. To enable Evidence Broker functionality, the property "curam.miscapp.evidenceBrokerEnabled" in Application - Miscellaneous Settings should be set to "YES" in the administration component. This will allow evidence sharing to take place between appropriately configured product deliveries and integrated cases.

3.3 Setting Up Evidence Sharing for Product Deliveries and Integrated Cases

Setting up evidence sharing for product deliveries and integrated cases is simple, and only requires the caseworker to enable or disable each evidence type for sharing on each case type. This means that SEM agencies can choose only those evidence types within cases that should be shared. For example, the income support integrated case type may have several evidence types and only a few of these evidence types may be enabled for sharing.

The evidence broker will only broadcast evidence changes for evidence types that have been enabled for sharing. If necessary, this configuration op-

tion can also be disabled. It is important to note that if this option is disabled, evidence that has already been broadcast to target cases will still apply. No subsequent broadcasts of this evidence type will occur, however.

3.4 Configuring Evidence Sharing between Case Types

Evidence broker allows evidence changes from external systems to be processed. The evidence broker configuration includes an indication that the target case is hosted on an external system and holds an external reference to the external system.

Additionally, there are two processes for configuring evidence sharing between case types: one for identical evidence and one for non-identical evidence. For both processes, it is necessary to select a source case and target case. The evidence broker will broadcast shared evidence from the source case to the target case.

The two processes differ in how the source and target evidence types are configured. For identical evidence, it is only necessary to select the evidence types that will be shared between the source and target cases. This is because the evidence types are identical. For non-identical evidence, it is necessary to select both the source evidence type and the target evidence type because the evidence types are different and the source evidence type may affect the target evidence type.

Evidence broker allows for the sharing definition to be tightly or loosely defined. Where tightly defined, the configuration specifies the exact case on both source and target. Where loosely defined, the wildcard ('*') feature can be used. This supports sharing specifications such as; share the specified evidence type with any product delivery containing this evidence type, share the specified evidence type with any integrated case containing this evidence type. Therefore this is a more open specification as the exact case type does not need to be specified.

For identical evidence, there is also a configuration option to automatically accept shared evidence. When this configuration option is enabled, the target case will automatically receive the shared evidence. New and updated evidence records will appear in the in edit workspace of the case. A pending removal will be set on all shared evidence removals unless the target evidence is 'in edit', in which case the 'in edit' evidence will be discarded. When this configuration is disabled, caseworkers will need to manually resolve the incoming evidence.

Chapter 4

Using the Evidence Broker

4.1 Introduction

Once the configuration options for sharing evidence are set, the evidence broker can be used by case workers to manage evidence. This chapter provides an overview of using the evidence broker.

4.2 Using the In Edit Workspace to Manage Evidence

Each product delivery and integrated case has its own 'in edit' workspace from which caseworkers can manage evidence updates. By default, this workspace displays all evidence on the case with an in edit status. It also displays any evidence pending removal.

If identical evidence is accepted, the evidence is updated onto the In Edit evidence list and thereafter the caseworker must manage the evidence as per any evidence that is in edit on the case. Likewise in resolving non-identical evidence the caseworker may capture evidence on the target case based on the incoming details; again this is maintained as per any new evidence on the case. For more information on how to manage evidence, see the `Cúram Temporal Evidence Guide`.

4.3 Processing Shared Evidence

When evidence is available for sharing, the incoming evidence list on the evidence tab is populated. This lists all evidence available for sharing for all evidence types on the target case. Identical evidence from source cases appear in a list separate from non-identical evidence. Caseworkers can choose to compare each evidence record from source cases individually. Options are provided to accept or reject identical evidence or dismiss non-identical evidence.

4.3.1 Notifying Caseworkers of Evidence Available for Sharing

Typically caseworkers will receive tasks indicating that there is evidence available for sharing. From these tasks, caseworkers can navigate to the Incoming Evidence list where they can review all the incoming evidence and take appropriate actions. The evidence broker automatically closes off these tasks when identical, broadcasted evidence is accepted or rejected and non-identical, broadcasted evidence has been dismissed.

4.3.2 Comparing Source Evidence to Target Evidence

To help caseworkers make decisions regarding broadcasted evidence, the evidence broker provides an option to compare the evidence being shared to existing evidence on the target case. In all evidence comparisons, a single evidence record from the source case is compared to one or more existing evidence records on the target case. The evidence broker will display all existing target evidence records on the target case which are active, in edit, or pending removal and which are assigned to the same participant as the source evidence and originated from the source case.

The comparison process is slightly different for identical and non-identical evidence. For identical evidence, the evidence broker displays a table of values for both the source and target evidence allowing the casework to compare like-for-like values. For non-identical evidence, the evidence broker displays the source evidence in a top panel and the target evidence in the bottom panel. The complexity of the evidence comparison increases with the number of target evidence records being compared to the source evidence record.

To make a decision on how to handle identical evidence, caseworkers can compare the effective date and status of the source evidence record to the effective date and status of the target evidence record(s). If the effective date for the source evidence record is different from the target evidence record, then the source evidence record can be active at the same time as the target evidence record since the two evidence records are effective during different time periods.

If the effective date is the same for the source and target evidence records, the evidence broker uses the status of the source and target evidence records to determine how the identical evidence is shared. Note that the evidence broker will highlight any records that are likely to be superseded if the caseworker accepts and activates the shared evidence. It will also highlight records that will be discarded or removed as a result of accepting and activating the broadcast. It is important that the caseworker understands how the evidence broker processes evidence based on the status of the incoming evidence.

The following table describes how the evidence broker will process evidence based on a set of possible sharing scenarios for identical evidence where the incoming evidence is related to the evidence on the case and has

the same effective date:

> **Important**
>
> The evidence broker has been designed to ensure that no conflicting evidence records can be activated on the evidence workspace. For example, the evidence broker does not allow two evidence records of the same type and relating to the same participant to be in edit at the same time. This is to avoid confusion between the in edit evidence records. It has also been designed to give caseworkers sufficient information to resolve conflicts on the evidence workspace before accepting incoming evidence.

Source Evidence Record Status	Target Evidence Record Status	Evidence Sharing Outcome
New	No existing evidence	The evidence broker shares the source evidence record on the target case. The new evidence record will have a status of in edit on the target evidence workspace.
New	In Edit	The new evidence record is not shared as there cannot be two in edit evidence records on the target evidence workspace for the same participant. The new evidence record can be accepted once the conflict is resolved.
New	Active with pending removal	The new evidence record is not shared since the active evidence is pending removal.
Updated	Active	The evidence broker shares the updated evidence record on the target case. The updated evidence record will have a status of in edit on the target evidence workspace. The evidence broker will also highlight that if activated, the shared record will supersede the active re-

Source Evidence Record Status	Target Evidence Record Status	Evidence Sharing Outcome
		cord.
Updated	In Edit	The updated evidence record is not shared as there cannot be two in edit evidence records on the target evidence workspace for the same participant. The updated evidence record can be accepted once the conflict is resolved.
Updated	Active with pending removal	The updated evidence record is not shared since the active evidence is pending removal. The updated evidence record can be accepted once the conflict is resolved.
Removal	Active	The target case will accept the removal; the active evidence record will have a pending removal status. The evidence broker will also highlight that if activated, the shared record will remove the active record.
Removal	In Edit	The target case will accept the removal and the in edit evidence record will be discarded.
Removal	Active with pending removal	The removal is not accepted as the active evidence record is already pending removal.
Removal of parent	Active with dependent records	The removal cannot be accepted until the dependent evidence records are resolved.

Table 4.1 Possible Evidence Sharing Scenarios based on Evidence

Statuses

4.3.3 Accepting or Rejecting Identical Evidence

The incoming evidence list displays the complete list of identical evidence available for sharing on the target case. From this list, caseworkers can choose to accept or reject any or all of the incoming evidence. While all incoming evidence can be rejected, the validations for accepting incoming evidence must take into account all evidence records for the same target evidence and ensure that there are no conflicts introduced with accepting the incoming evidence. In addition to the basic validations described in Table 4.1, *Possible Evidence Sharing Scenarios based on Evidence Statuses*, there are additional validations which come into play when accepting multiple incoming evidence records with conflicts. The following table describes these additional validations:

> **Note**
>
> Caseworkers may find it easier to accept one incoming evidence record at a time, particularly when there are many related records leading to an increased risk of conflicts.

Source Evidence Record Statuses	Evidence Sharing Outcome
New incoming evidence record, related incoming evidence update	As the updated evidence is related to the new evidence, the caseworker must accept these records one at a time.
New incoming evidence record, related incoming evidence removal	In this scenario, the caseworker can accept either of these on its own or both; however, by accepting both, the evidence broker will discard the new, incoming evidence record due to the acceptance of the related removal.
Multiple, related incoming evidence updates	As the updates are related to each other, the caseworker must accept these updates one at a time. Evidence comparison can help the caseworker determine which evidence update is more suitable (if either) for acceptance on the target case.
Incoming evidence update, related incoming evidence removal	In this scenario, the caseworker can accept either of these on its own or both; however, by accepting both, the evidence broker will discard the updated incoming evidence record due to the acceptance of the related

Source Evidence Record Statuses	Evidence Sharing Outcome
	removal.
New incoming evidence record, related incoming evidence update, related incoming evidence removal	Either the new or the updated evidence can be accepted but not both. The removal can be accepted along with the acceptance of either of these.

Table 4.2 Additional Validations Applied when Accepting Multiple Incoming Evidence Records

4.3.4 Dismissing Non-Identical Evidence

In addition to displaying the complete list of identical evidence available for sharing on the target case, the incoming evidence list also displays the list of non-identical evidence. Non-identical evidence must be manually dismissed (there is no functionality to automatically accept non-identical evidence changes). The evidence broker provides the ability to compare the non-identical evidence with the related evidence for the same client on the target case and to mark the non-identical evidence as dismissed.

4.4 Viewing Evidence Change History

The evidence change history provides a complete view of the changes made to a single piece of evidence. (A link is provided on the View Evidence page, Updated By field.) This history includes evidence changes made in the evidence workspace and shared evidence changes handled by the evidence broker. The following table describes each possible evidence change:

Evidence Change	Description
Input	This is when evidence is first created.
Updated	This is when an active evidence record has been updated and those updates have been accepted.
Pending Removal Set	This is when an active evidence record has a pending removal set.
Pending Removal Discarded	This is when a pending removal is discarded.
Superseded	This is when an active evidence record has been updated and the updates have been activated, thus superseding the existing, active evidence record.

Evidence Change	Description
Cancelled	This is when new evidence with an in edit status is canceled (before the evidence is activated).
Activated	This is when an in edit evidence record is activated.
Submitted	This is when evidence is submitted for approval before activation.
Approved	This is when evidence is approved for activation.
Rejected	This is when evidence is rejected and thus cannot be activated.
Pending Update Set	This is when an active evidence record is being updated and thus the pending update is set.
Pending Update Discarded	This is when an active evidence record was being updated but the evidence updates were cancelled, thus discarding the pending update on the active evidence record.
Evidence Transfer	This is when evidence is transferred from one case to another case.
Shared Evidence Added	This is when new evidence is available for sharing.
Shared Evidence Updated	This is when evidence updates are available for sharing.
Shared Evidence Accepted	This is when shared evidence has been accepted on the target case. The acceptance indicator is set on the source evidence.

Table 4.3 Summary of Evidence Changes

Appendix A

Evidence Sharing Business Scenarios

A.1 Introduction

This appendix provides simple business scenarios to demonstrate the manual acceptance of identical evidence, the automatic acceptance of identical evidence, and non-identical evidence sharing.

A.2 Manual Acceptance of Identical Evidence

John Patterson is the primary client on a Cúram Global Income Support - Screening™ (CGISS) integrated case and a member of a Cúram Child Services™ (CCS) case. John informs his CGISS assigned caseworker of new Living Expense evidence. The caseworker adds this evidence and activates it.

Living Expense evidence also applies to eligibility determination for CCS. The system is configured administratively to share this evidence type from CGISS to CCS, but not automatically. When the caseworker applies the Living Expense evidence on the CGISS case, the system determines that this is a shared evidence type and that the participant John Patterson exists on both cases.

The evidence broker updates the incoming evidence list to display the new available shared evidence. The caseworker in charge of the CCS case is notified of the shared evidence and examines the evidence. Once satisfied that they agree with the change, the caseworker accepts the broadcast change. This evidence is now In Edit on the CCS case and may be activated as normal.

A.3 Automatic Acceptance of Identical Evidence

Mary Smith is the primary client on a CGISS integrated case and a member

of a CCS case. Mary informs her CGISS assigned caseworker of changes to her Liquid Resource evidence. The caseworker updates this evidence and activates it. Liquid Resource evidence also applies to eligibility determination for CCS. The system is configured administratively to share this evidence type from CGISS to CCS, and to automatically accept any evidence change.

When the caseworker applies the Liquid Resource evidence on the CGISS case, the system determines that this is a shared evidence type and that the participant Mary Smith exists on both cases. The system updates the Liquid Resource record on the CCS case and places it 'in edit. The caseworker in charge of the CCS case is notified of the automatically accepted shared evidence change and can activate it as normal.

A.4 Non-Identical Evidence Sharing

Joe Williams is the primary client on a CGISS integrated case and his son Michael is a member of the case. Joe informs his CGISS assigned caseworker that his son Michael has been immunized and the caseworker updates the child's Medical evidence to reflect this. Joe and his son are also members of a CCS case.

Immunization evidence also applies to eligibility determination for CCS but in a different format, as CCS evidence records full details of child immunization dates and times. The system is configured administratively to share non-identical evidence types of Medical evidence and Child Immunization evidence from CGISS to CCS.

When the caseworker applies the Medical evidence on the CGISS case, the system determines that this is a shared evidence type and that the participant Michael Williams exists on both cases. The caseworker in charge of the CCS case is notified of the shared non-identical evidence change, and can navigate to details of the change in order to decide on what action to take.

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