IBM Cúram Social Program Management
Version 6.0.5

Cúram Outcome Management Configuration Guide

IBM

> **Note**
> Before using this information and the product it supports, read the information in "Notices" on page 43

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This edition applies to IBM Cúram Social Program Management v6.0.5 and to all subsequent releases unless otherwise indicated in new editions.

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Configuring Outcome Management

Use this information to configure assessments and outcome plans. The assessment definition is an administrative template for individual assessments. Outcome planning can be configured to address and manage the needs that are identified during assessment.

Introduction

Purpose

The purpose of this guide is to describe the configuration options available in Cúram Outcome Management to configure assessments and outcome plans. This includes descriptions of how an assessment must be configured before it can be used to identify client needs and also describes the tools that can be used to derive assessment results. It also includes details of how outcome planning can be configured which allows for structured outcome management to address and manage the needs identified during assessment. Two appendices are provided which outlines a step by step approach to creating a simple assessment using CDA and CER.

Audience

This guide is intended for administrators responsible for configuring the Cúram Outcome Management components. It is assumed that the administrators have worked with code tables, application properties, and system security as part of Cúram system administration.

Prerequisites

The *Cúram Outcome Management Guide* is a reading prerequisite.

Chapters in this Guide

The following list describes the chapters within this guide:

Configuring Assessments
> This chapter describes the configuration of assessments.

Configuring Outcome Plans
> This chapter describes how to configure the components of outcome plans.

Using Dynamic Products With Outcome Management
> This chapter describes how a service using dynamic products can be configured so that it can be added to an outcome plan.

Configuring Assessments

Introduction

This chapter provides an overview of the assessment settings that are available to configure assessments. Each assessment that is run is configured in administration as an assessment definition. An assessment definition is the template on which an individual assessment is based. The following can be recorded for an assessment definition once it has been configured:

- The categories applicable to the assessment
- The factors that are assessed as part of the assessment
- The classifications for factors that are assessed
- The roles that clients can play in the assessment
- Additional classification configurations for individual factors
- Activity recommendations for factor classifications
- Associations between assessments and case types

Configuring An Assessment Definition

A number of configuration settings are provided for an assessment definition. These settings allow an administrator to specify how assessments that are based on this assessment definition are managed and how the assessment results are displayed.

The Assessment Interval Days, Reassessment Warning Days, Assessment Configuration, Approval Check Percentage, Type drop-down list, the Role Change Allowed indicator, the Reassessment Allowed indicator and the Security Identifiers determine the way assessments that are based on this assessment definition are managed.

The remaining configuration options determine the way the assessment results are displayed when a client is assessed. These include the Group name field, Display Graphs indicator, Graph By drop down list, Priorities Applicable indicator, Graph Type drop down list, Display Guidance indicator, Group Results By Category indicator, Display Score Indicator, Guidance Result Cluster drop down list, Factor Display Text, Classification Display Text and Count Same Score As One Priority. The Results Page field allows the default assessment results page to be overridden with a different page if required.

Assessment Interval And Reassessment Warning Days

The Assessment Interval represents the frequency at which an assessment may be run, for example 30 days. It is used to calculate the reassessment due date of an assessment. For example, if an assessment is run on the 01/01/2011 and the Assessment Interval has been set to 30, the reassessment due date is 31/01/2011. The Reassessment Warning Days works in conjunction with the Assessment Interval and is used to alert the case worker who executed the last assessment that a reassessment is due. For example, the Reassessment Warning Days may be set to 5 days. In this case, a task can be created 5 days before the reassessment due date and assigned to the case worker who last ran the assessment.

Associating CDA Or CER With An Assessment Definition

Each assessment definition uses an IEG script combined with either a Cúram Decision Assist(CDA) matrix or a Cúram Eligibility Rule set (CER) to derive the assessment results. The Assessment Configuration drop-down list is used to indicate if the assessment results will be derived using the CDA matrix or a CER rule set. The decision on whether to use a CDA matrix or a CER rule set depends on the complexity of the assessment.

CER can be used for more complex assessments where deriving the assessment results requires rules processing. For example, a Risk Assessment has two factors, Neglect and Abuse. Neglect is classified using classifications of Low (-1 to 1), Moderate (2 to 5), High (6 to 8) and Very High (9+). Abuse is classified using classifications of Low (-1 to 0), Moderate (1 to 3), High (4 to 6) and Very High (7+). The assessment produces a risk level which is derived from the highest of the

classifications for Neglect and Abuse i.e. If the household being assessed is classified as Moderate for Neglect and Very High for abuse, the risk level is Very High. This type of processing requires a CER rule set. In addition, this Risk Assessment allows for overrides whereby the user can override the assessment results. CER is required to implement the override processing for this assessment.

CDA can be used for assessments where results can be derived without rules processing. For example, a Caregiver Strength and Needs (CSN) assessment contains nine factors. Each factor has one question with four possible answers. The assessment result for each factor is derived from the answer provided by a user.

Note: A new CDA or CER assessment can be added to this list during CDA and CER administration. See Appendix A, Configuring a CDA Assessment which outlines a step by step example of how CDA is used to derive assessment results. See Appendix B, Configuring a CER Assessment which outlines a step by step example of how CER is used to derive assessment results.

Defining Whether Assessment Is Group Or Role-based

Administrators can specify whether an assessment definition is group or role based using the Type drop-down list. When the Group Based option is selected, the questions asked during the assessment are specific to a group of clients, such as a household i.e. If there are 5 members in the household the questions are asked only once of the entire household.

When the 'Role Based' option is selected, the questions asked are specific to the roles defined for the assessment definition. For example, for the CSN assessment, the questions are specifically asked of the Primary Caregiver and asked of the Secondary Caregiver.

For group-based assessments, the name of the group must also be specified.

A configuration option is provided that allows administrators to specify whether the assessment questions are applicable to each role on the assessment or to specific roles only. For example, an administrator can configure the assessment questions to apply to the Primary Caregiver and Secondary Caregiver but not the Focus Child in a CSN assessment. "Indicating If Questions Are Applicable" on page 11 describes this option.

When the Questions Applicable option is set on the role and the Role Based option is selected for an assessment definition, the assessment questions are asked of the roles defined for the assessment definition.

Some assessments which have group and role characteristics will require results to be displayed for both a group of clients and for individual clients. For such assessments, some factors will be group based where there are results for a group of clients and other factors will be role based where there are results for individual clients. The assessment framework supports the display of such results by displaying factors with results for a group of clients in one list and displaying factors with results for individual clients in another list. For example, the Reunification assessment consists of four parts and has results for each part, some of which are for a group of clients and others which are for individual clients. The four parts are Risk, Visitation, Safety and Placement and results are determined for each part so four factors are configured to represent the results. The Risk and Safety factors produce results for a group of clients and the Visitation and Placement factors produce results for clients satisfying the child role. So the assessment results display the results for Risk and Safety factors together and the results for Visitation and Placement factors together.

For such assessments that have group and role characteristics, the results page must be specified as AssessmentDelivery_viewCombinedResultsForInstance. This page displays the factor for a client if there is an associated case participant ID. If there is no associated case participant ID, the page will display the factor for the group.

Determining If Role Changes Are Allowed

Administrators can specify if role changes are allowed for reassessment. The 'Role Change Allowed' indicator is used to specify if the roles defined for the assessment can be changed on reassessment.

When the Role Change Allowed indicator is selected, the Select Clients and Roles page is displayed on reassessment that allows the caseworker to change the roles for the assessment.

If the Role Change Allowed indicator is not selected, the Select Clients and Roles page will not be displayed on reassessment.

Note: Role changes are not allowed for reassessment purposes if only one role is defined for the assessment definition and only one client exists on the assessment.

Defining If Reassessment Is Allowed

Administrators can specify if reassessment is appropriate for an assessment. Reassessment allows a client's progress for specific factors to be measured over time. Reassessment is applicable to some assessments. For example, certain Child Welfare assessments can be reassessed multiple times, for example a CSN assessment. Other Child Welfare assessments are designed to be run only once, for example, a Risk Assessment.

When the Reassessment Allowed indicator is selected, an option to reassess the assessment is displayed on the assessment home page. This option allows a caseworker to either reassess for all of the factors defined for the assessment or reassess for a subset of factors only.

If the Reassessment Allowed indicator is not selected, the reassess option is not displayed on the assessment home page and the assessment cannot be reassessed.

Graph Configurations

A number of configuration settings can be specified that determine how the assessment results are graphed. This section describes the configuration options that are available for graphing assessment results.

Selecting To Display Graphs Or Lists: Assessment results can be displayed in graphical or list format. When the Display Graphs option is selected, the assessment results for each client being assessed are displayed in graphs. When the Display Graphs option is not selected, the assessment results are displayed as a standard list.

The graph provides a view of results, for each client, across all of the factors defined for the assessment, for example, substance abuse, domestic violence, social support.

The scores obtained by James and Linda per factor are displayed on the y-axis of the graph. The graph can be configured to display either scores or classifications on the y-axis. See

"Defining Whether To Graph By Classification Or Score" for more information. Selecting an individual tab, such as substance abuse, displays the clients' assessment results for that specific factor on a graph.

Selecting to graph or to list the assessment results depends on the assessment itself. For example, it may be more appropriate to list the results of a single factor assessment. Additionally, if reassessment is not applicable to an assessment, it may be more appropriate to list the results.

If an assessment has multiple factors that use the same classification and scoring ranges and/or if reassessment is applicable, it may be more appropriate to graph the results. Graphed results allow a caseworker to track a history of the client or family's progress over time.

Defining Whether To Graph By Classification Or Score: Administrators can graph assessment results by classification or score. When the Graph by Classification option is selected, the classifications that are defined for the assessment are displayed on the y-axis of the graph. When the Graph by Score option is selected, the range of scores defined for the assessment is displayed on the y-axis.

The classifications defined for the CSN assessment are Need and Strength. These classifications are displayed on the y-axis. The order in which these classifications are displayed on the graph is configurable. See "Re-ordering How Classifications are Displayed" on page 11 for more information.

Note: The options available for selection in the Graph By field are defined in the AssessmentDefGraphBy code table. A new graph by value can be dynamically added to this code table and published as part of system administration.

Defining The Type Of Graph: Two types of graph are available for selection when displaying assessment results - a radar graph and a bar graph. The Graph Type drop down list can be used to specify the type of graph to be used when displaying results on the assessment results page and the assessment home page. A user also has the option to change the type of graph at runtime.

Note: The options available for selection in the Graph Type field are defined in the AssessmentDefGraphType code table. A new graph type can be dynamically added to this code table and published as part of system administration.

Application Property For Configuring Colors In Graphs: The application property curam.assessmentplanning.graphRGBColors indicates the colors of the graphs displayed in the assessment results page and the assessment home page. The application property curam.assessmentplanning.progressGraphRGBColor indicates the colors of the graphs displayed on the progress graphs for each factor. The values of these properties are set by entering a comma-delimited list of Red Green Blue (RGB) color codes. The default value for curam.assessmentplanning.graphRGBColors is B99CCA,80C975,F2788E,6A9DBD,F8B865,98D7DA,F79BC9. The default value for curam.assessmentplanning.progressGraphRGBColor is 3BAFE2.

Defining If Priorities Applicable

Administrators can specify whether or not priority selection is applicable to an assessment definition. Priority selection is used to ensure that the most pressing or urgent assessment results are dealt with by a caseworker. When the Priorities Applicable indicator is selected, a check box is displayed beside each factor for

which a client was assessed on the assessment results page. The caseworker can select each factor that is considered a priority from this list. For example, a case worker might prioritize the factors for which the client scored the lowest results.

If the Priorities Applicable indicator is not selected, the priority selection check boxes are not displayed in the case worker application.

Configuration settings are also available which allow an administrator to hide particular results from priority selection and to hide a particular result for selected factors from the priority selection list. See "Hiding Classification From Assessment Results" on page 14 for more information.

Two configuration settings are also available that allow a minimum and maximum number of priority factors to be specified for each classification. See "Defining Priority" on page 10 for more information.

Grouping Results List by Category

The assessment results list that is displayed on the assessment results page can either be grouped by classification or by category defined for the assessment definition. The assessment results list can only be grouped by category or by classification when a single category is defined for an assessment definition. See "Configuring Categories" on page 8 for more information on configuring categories. See "Configuring Classifications" on page 9 for more information on configuring classifications.

When the Group Results by Category indicator is selected and a single category is defined, the results are displayed in one list.

When the Group Results by Category indicator is not selected, a single priority list is displayed for each classification achieved in the assessment results.

If multiple categories are defined for the assessment definition, the Group Results by Category indicator is not applicable and the priority selection list is always grouped by category. The assessment results list will not be grouped by classification if multiple categories are defined for the assessment definition. For example, two categories are defined: Need and Barrier. Therefore, two separate assessment results lists are displayed: one list for the Need factors and one list for the Barrier factors.

Displaying Scores In The Assessment Results

The Display Scores option indicates whether or not scores should be displayed in the assessment results. When this option is selected, the assessment scores are displayed in the assessment results. When this option is not selected, the scores are not displayed. In certain circumstances, an administrator may not want to display scores in the assessment results. For example, a Risk assessment has 6 factors defined, only 3 of these are based on score. The caseworker may only be interested in the classification that is determined from the score.

Displaying Guidance

Guidance is guideline text or help text that is used to assist a caseworker in addressing needs identified during the assessment of factors. For example, guidance can be provided which suggests that a caseworker can address a factor by creating particular services for clients. Two configuration settings are provided that allow administrators to specify how pre-defined guidance text is displayed for an assessment: the Display Guidance indicator and the Guidance Result Cluster.

When the Display Guidance indicator is selected, a guidance results cluster is displayed on assessment results page and a guidance tab is displayed on the assessment home page. Clicking on the guidance tab displays the guidance text defined for a factor classification or factor classification sub division. If the Display Guidance indicator is not selected, the guidance results cluster and guidance tab are not displayed in the caseworker application.

The Guidance Results Cluster setting allows administrators to specify whether the guidance results cluster displayed on the assessment results page will be open or closed when the assessment results are displayed. When the guidance results cluster is set to 'Open', the cluster will be automatically expanded when the assessment results are displayed. This allows the caseworker to see all of the guidance text defined for a factor classification or factor classification subdivision.

When the guidance results cluster is set to 'Closed', the guidance text defined for the factor classification or factor classification sub division will be hidden when the assessment results are displayed. The caseworker must manually expand the cluster to view the guidance text.

Selecting to open or close the guidance results cluster depends on the amount of guidance text that has been defined for an assessment. For example, if a lot of guidance text has been defined for an assessment, it may be appropriate to close the guidance results cluster to preserve space on the assessment results page.

Note: In order to display guidance, guidance text must be defined for specific factor classifications and/or factor classification sub divisions as part of administration. See "Adding Definitions And Guidance" on page 14 for defining guidance for classifications and classification sub divisions for a factor.

Factor and Classification Display Text

The term factors and classifications may be named differently from agency to agency. For example, a factor may be called a dimension or a domain. Classifications may be called a rating or result. To cater for this, the Factor Display Text and Classification Display Text is provided which allows an administrator to define the names that should appear in the assessment results for factor and classification.

Count Same Score As One

A case worker may be restricted to selecting a maximum number of priority factors, for example, a case worker may only be allowed to specify 3 priority factors. If multiple clients on an assessment achieve the same score for the same factor, then this indicator allows this factor to be counted as one rather than two (if there are two clients). For example, if client 1 and client 2 score -3 for substance abuse, and this indicator is switched on, a case worker can specify that substance abuse for both clients are priorities and the case worker can then select two more priority factors i.e. 4 priority factors can be selected instead of the maximum of three. If this indicator was switched off, substance abuse for client 1 and substance abuse for client 2 could be selected along with only one other factor i.e. The maximum of 3.

Results Page

The Result Page field enables an agency to override the default assessment results page if they need to do so.

Security Identifiers

When a user attempts to perform particular operations on an assessment, the system will check to ensure the user has the appropriate privileges to perform a particular action. A number of security identifiers (SIDs) can be defined, and if specified, must be included in a users profile before they can perform the associated action. The following table outlines the SIDs that can be specified for an assessment.

Table 1. Assessment SIDs

SID	Description
Create Rights SID	If specified a user must have this SID in their security profile to create an assessment.
Approve and Reject Rights SID	If specified a user must have this SID in their profile to approve or reject an assessment.
View Answer Rights SID	If specified a user must have this SID in their profile to view an assessment.
Close Rights SID	If specified a user must have this SID in their profile to close an assessment.

Configuring Assessment Approval Checks

Assessment approval checks determine the percentage of assessments that must be reviewed by a case supervisor. For example, an approval check can be set up such that 50% of assessments submitted for approval will require manual approval; the other 50% will be automatically approved.

Three configuration options are available that allow the agency to configure assessment approval checks. Assessment approval checks can be set up at the user, organization unit, or assessment definition level. Creating approval checks for a user governs assessments submitted by a particular user; creating approval checks for an organization unit governs assessments submitted by all users assigned to positions in that organization unit; creating approval checks at the assessment definition level governs all assessments of that type submitted (across all users).

At the user and organization unit levels, an administrator can specify whether the approval check should apply to a single assessment type or to all assessment types. When an an assessment is submitted for approval by a user, the system first checks the user's assessment approval check information. If no assessment approval checks exist at the user level, the system then looks for any assessment approval checks for the organization unit that the user belongs to. If there are no assessment approval checks for the organization, then the system checks the assessment approval. If at any point the system determines that the assessment requires approval, the assessment is assigned to a case supervisor for approval.

Configuring Categories

One or more categories can be specified for each assessment definition. An assessment is made up of one or more factors. These factors are categorized in order to determine the applicable classifications for the assessment. Examples of categories include Need and Barrier. A Need category may consist of factors such as Income and Housing i.e. Something that clients need. A Barrier category may consist of factors that prevent a client or family's progress in achieving something. Examples of Barrier factors may include substance abuse, domestic violence, cultural identity.

There are two steps to category configuration. An administrator must first add the new categories to the category code table and then associate one or more of these categories with an assessment definition.

Note: Once a category has been associated with an assessment definition, it can be used to group the factors that apply to the assessment definition. See "Selecting A Category For A Factor" on page 12 for more information.

Adding A New Category To The Category Code Table

Categories are defined in the AssessDefFactorType code table. A new category can be dynamically added to this code table and published as part of system administration. Two default categories are provided: Need and Barrier.

Associating A Category With An Assessment Definition

Once a new category has been added to the category code table, it must be associated with an assessment definition before it can be used to categorize factors. There are two ways of associating a category with an assessment definition. When a category has been added to the category code table, it is automatically displayed on the Create Assessment Definition page.

One or more of the categories displayed can be associated with the assessment definition by selecting them when the assessment definition is created. Alternatively, one or more categories can be associated with an assessment definition from the Categories tab on the assessment definition.

Configuring Classifications

Classifications are the potential results that a client can achieve when assessed for a factor. Classifications are used to define a scale that measures a client's position pertaining to the factors being assessed. For example, the classifications configured for a Need category may include 'At Risk', 'In Crisis', 'Stable', and 'Thriving'. When a client is assessed across a number of factors, the classifications defined by the administrator for the category of factors being assessed represent the results of the assessment.

Classification configuration allows the administrator to define individual classifications and associate them with categories. When a classification is associated with a category, it automatically applies to all factors defined for the selected category.

Note: A number of additional configuration options for classifications are available for individual factors. These provide a finer level of granularity when configuring classifications for factors. See "Configuration Options For Factor Classifications" on page 14 for information on these options.

Adding A New Classification To The Classification Code Table

Classifications are associated with the Classification Division Type code table. A new classification type can be dynamically added to this code table and published as part of system administration. When a classification is added to the classification code table, it is automatically available for selection in the Classification drop-down list.

Associating a Classification with a Category

Associating a classification with a category assigns the classification to a category that has been defined for the assessment. An administrator can associate the classification with a pre-defined category using the Classification drop-down list.

Defining Priority

An administrator can configure the minimum and maximum number of priority factors that can be selected by a case worker during priority factor selection on the assessment results page. For example, an administrator can specify that at least 3 factors which have been classified as 'In Crisis' must be selected as priority.

An administrator can also specify that particular classifications can be hidden from results. For example, an administrator can dictate that factors where a client has scored 'Thriving' should be hidden from the assessment results. This can be used to ensure that a case worker focuses mainly on factors where the client has scored poorly. This section outlines these configuration options.

Defining a Minimum Priority Number: A minimum priority number can be set for a classification. This defines the minimum number of factors achieving this classification that must be specified as a priority on the assessment results page. For example, if the minimum priority number is set to 1 for a classification of 'In Crisis', a minimum of one factor which has been classified as 'In Crisis' must be selected as a priority by a case worker on the assessment results page.

Defining a Maximum Priority Number: A maximum priority number can be set for a classification. This defines the maximum number of factors achieving this classification that can be specified as a priority on the assessment results page. For example, if the maximum priority number is set to 3 for a classification of 'Thriving', a maximum of three factors which have been classified as 'Thriving' can be selected as a priority by a case worker on the assessment results page.

Hide From Result: A classification can be hidden from assessment results. The Hide From Result indicator dictates whether factors achieving a particular classification when assessed should be hidden in the assessment results. For example, if this indicator is switched on for a classification of 'Thriving', factors classified as 'Thriving' will not be displayed in assessment results.

Developing Custom Escalation Processing For Classifications

Two configuration settings are provided to support an agency's custom escalation processing. An agency can create custom processing that is invoked if a priority factor is not addressed within a specified number of days. For example, an agency may wish to send a notification to a caseworker reminding them that a factor marked as a priority has not been addressed. Depending on the custom processing that is implemented, the notification may take the form of an email that is sent to the caseworker's inbox or a reminder that is displayed in the caseworker's calendar.

Configuring The Initial Warning Number Of Days: An initial warning number of days can be set for each classification. The initial warning number of days is the number of days after which an initial warning should be sent to a user. For example, if the initial warning number of days is set to 3, the system may automatically send a notification to the caseworker after three days if a factor that is marked as a priority has not been addressed.

Configuring The Escalation Number Of Days: An escalation number of days can be set for each classification. The escalation number of days is the number of days after which an escalation warning is sent to a user. For example, if the escalation number of days is set to 10, the system may automatically send a notification to a case supervisor after ten days if a factor that is marked as a priority has not been addressed by a caseworker.

Re-ordering How Classifications are Displayed

Administrators can re-order the way classifications are displayed in the assessment results. The classification display order dictates the order in which the classifications are graphed or listed in the assessment results.

Once re-ordered, the classifications are displayed from top to bottom for listed assessment results. For graphed assessment results, the classifications are displayed from top to bottom on the y-axis of the graph.

Configuring Roles

An assessment role is the part a client (or clients) plays in an assessment. Roles must be identified and created by an administrator when an assessment definition is created. There must be at least one role specified for an assessment before it can be run, but multiple roles can be configured. A role can be configured such that multiple clients can fill that role during an assessment.

Roles in an assessment can be specified as mandatory. This means that at least one client must be specified for the role before the assessment can be carried out by a case worker. Administrators can specify whether questions are applicable to a role. If the administrator specifies that questions should not be applicable to a role, then the questions will not be presented for the client fulfilling that role during the assessment. The order in which roles are processed in an assessment can be changed.

An abbreviation can also be specified for an assessment role which can then be displayed in the assessment results rather than displaying the full name of the role.

Defining An Abbreviation

An abbreviation can be specified for an assessment role. This can be used if there are multiple roles in an assessment and displaying the name of each role may take up too much space, for example, the role of 'Primary Caregiver' could be abbreviated to 'PC'.

Setting The Role As Mandatory

When creating an assessment role, the administrator can specify that the role is mandatory. This means a client must be selected for that role (e.g., the primary care giver for a CSN assessment) before the assessment can be run. Mandatory roles must be filled before an assessment can proceed.

Supporting Multiple Clients For A Role

An administrator can define that multiple clients can fulfill a role. This means that multiple clients can be selected for the same role when running an assessment. For example, if a CSN assessment is required for a case and two children exist for the role of child, they can both be assigned to the same role.

Indicating If Questions Are Applicable

In some cases questions are not asked of clients fulfilling a particular role. For example, in the CSN assessment, the role of focus child does not require questions to be asked of the child. Administrators can specify whether questions are asked of a client fulfilling a particular role.

Note: If the assessment type is group based, then this indicator is not applicable.

Reordering How Roles Are Processed And Displayed In An Assessment

The order in which roles are processed in an assessment can be configured. For example, in the CSN, questions can be asked of the primary care giver first, then the secondary giver. In an assessment where multiple clients are specified for a role, the default processing for assessments is to ask the oldest person associated with any role the questions first. Lists of clients will also be displayed based on the ordering configured for their associated roles.

Application Property For Configuring Available Case Participant Roles

The curam.assessmentplanning.applicableCaseParticipantRole is used to define which case participant role types from the caseParticipantRoleTypes code table are displayed to case workers when running an assessment from a case.

Configuring Factors

Factors are used to assess, track, and account for client, family, community or agency progress toward the objective of an assessment. Typically, a factor is considered either a Need or a Barrier. Needs are things that a person or family require to be self-sustaining but currently lack. Barriers are conditions that prevent or complicates a person's ability to obtain or achieve something. The factors being measured as part of an assessment will help determine the services that will benefit a client or family.

Each assessment has a set of factors which describe performance standards for that assessment. Factors are unique to individual assessments. This means that factors cannot be reused across assessments. This is because each assessment will have unique characteristics and while some factors may look similar between assessments, the details of factors such as classifications, thresholds, etc., will differ across assessments. There must be at least one factor defined for an assessment in order for the assessment to be run.

A threshold value can be configured for a factor. Threshold values are used to indicate a level of functioning for the assessment factor. Factors can be re-ordered. This allows the administrator to configure the order in which factors are displayed to the case worker, for example, the order of factors on an assessment results graph. CDA outcomes can be assigned to factors that use a CDA matrix to derive the assessment results. This section outlines factor configuration options in detail.

Selecting A Category For A Factor

A category must be specified for a factor. As already described in "Configuring Categories" on page 8, categories must be specified before factors can be added to an assessment. How a factor is categorized will depend on the factor. For example, in a self sufficiency assessment, there may be a range of factors that need to be assessed in order to determine whether a person or family is self sufficient. In such an assessment, a number of Need factors may be identified such as child care, language proficiency, education & literacy, etc. Similarly, a range of Barrier factors may be identified such as mental health, physical health, alcohol abuse, etc. So, for this self sufficiency assessment, all factors can be classified as either a Need or a Barrier category.

Note: Once a category has been selected for a factor, any classifications associated with that category are the classifications used to classify that factor during assessment.

Indicating A Threshold For Scoring

Each factor has a threshold value, which represents a marker/value on a factor scale. The threshold value is used to indicate the relative level of functioning for a factor. For example, on a scale of 1-10 for household income, a threshold of 5 can indicate a sufficient level of functioning. Depending on the assessment, the meaning of the threshold may vary. For a self sufficiency assessment, the threshold may represent the value that must be satisfied for a client to be considered self-sufficient. For a back to work assessment, the threshold may represent the value that must be satisfied in order for a client to be considered to be able to obtain and sustain employment. Threshold is a string value. This allows the threshold value to be blank and not be defaulted to zero when the threshold is not specified by an administrator.

Merging Factor Results

The same assessment may be run multiple times for the same person and in some cases it is appropriate to merge the factor results produced. For example, a CSN assessment may be run for client 1 focusing on client 2. It may subsequently be run again for client 1 focusing on client 3. In this case, client 1 is assessed twice for Substance Abuse. The results for substance abuse can be merged i.e. only one result for substance abuse is displayed when an assessment is run, rather than two sets of results. The merge indicator dictates if factor results are merged or not when an assessment is run. If merging is switched on, the results are merged and the latest factor results is displayed.

Indicating Whether Planning Is Applicable For A Factor

Some factors are only required for the assessment in that they are used to determine the results of an assessment and are not involved in the planning aspects so therefore do not need to be available outside of the assessment. Whereas other factors are used for the assessment and are required for planning.

The planning applicable indicator allows the administrator to mark those factors that are involved in planning and will be available outside an assessment. If the planning applicable indicator is set to true, the factor can be associated with the objectives and activities that are added to the plan. If the indicator is set to false, the factor will be displayed in the assessment results only, and will not be displayed when the user is adding objectives or activities to the plan, or in the activity workspace.

Re-ordering Factors

Administrators can re-order the way factors are displayed in an assessment. For example, once re-ordered, factors will be displayed in a particular order in the results list when an assessment is executed.

Mapping Outcomes to Factors

Outcomes can be assigned to assessment factors. If an assessment uses a CDA matrix to derive the results , CDA outcomes must be mapped directly to assessment factors. This differs slightly depending on how the CDA matrix for the assessment is configured. If the CDA question matrix is scored with outcomes specified for each answer, these outcomes will be presented to the administrator when mapping the outcome to the factor for the assessment. For example, in the CSN decision matrix, scores are assigned for each question/answer value. These scores are also mapped to the various CSN assessment outcomes. When selecting an outcome for the assessment factor substance abuse, the outcome that has been specified in the decision matrix (CSN Substance Abuse) is presented to the administrator for selection.

Mapping outcomes to factors for assessments that are not based on scoring is slightly different. If assessment outcomes are not specified for the answer values in the assessment question matrix, the administrator selects the required outcome for each factor classification from the list of available outcomes for the assessment.

Note: Assessments which use a CER rule set to derive the results do not use outcomes as outlined above. CER rule sets can be created to produce scoring and/or classifications, so outcomes do not need to be defined.

Configuration Options For Factor Classifications

Once the classifications described in "Configuring Classifications" on page 9 have been configured, they are automatically associated with a factor when a factor category has been specified. Administrators can configure additional information for each classification at the factor level. Factor classifications represent measurement indicators for an individual factor. A classification is a portion of the scale that measures the actual progress of a client, e.g., 'Need', 'Neutral', 'Strength'. A subdivision defines a portion of the range entered on the classification enabling a finer level of measurement.

A maximum and minimum range can be set for factor classifications. This is the range that a factor score must fall between in order to achieve that classification. Administrators can also choose to hide factors which have achieved a particular classifications from assessment results.

Recommended activities can also be configured for a factor classification and classification subdivision. This allows activities to be recommended to a case worker when a client achieves a particular score/classification when assessed.

The following can also be recorded for factor classifications:
- Definitions
- Subdivisions
- Guidance Text

Defining The Minimum/Maximum Range

A minimum and maximum range can be set for classifications. This enables the administrator to configure how classifications are rated on a scale. For example, the CSN substance abuse factor has a 'Strength' range of 0 to 5, and a 'Need' range of -3 to 0. When a client is assessed for substance abuse and they achieve a score of -2, they are classified as having a 'Need' since -2 falls within the 'Need' range.

Hiding Classification From Assessment Results

Administrators can hide factor classifications from assessment results. If a factor classification is hidden, this means the factor will not be presented to the case worker in the assessment results if the classification is achieved by a client. This allows the administrator to specify which factor classifications will be displayed for a factor. For example, an agency may want a case worker to concentrate on a substance abuse factor where a client has been classified as a need, but not a strength. In this case, a factor classification of 'Strength' can be hidden.

Adding Definitions And Guidance

Administrators can add a definition and guidance text for factor classifications. A definition provides a description of what a particular score means i.e. It aims to describe a clients situation if they achieve a particular classification. The guidance text defined for a factor classification is displayed in the case worker application within the assessment results. Guidance assists a case worker in the analysis of

client results and helps them to deal with clients achieving particular results. It may contain items or information that should be considered by a case worker when considering activities to address the factor result.

Configuring Classification Subdivisions

Classification subdivisions can be used to further separate and define information for smaller ranges within the main factor classification range. Subdivisions allow further processing to be assigned to factor classifications. For example, an income factor can be classified as 'In Crisis' with a range of -5 to 0. The 'In Crisis' classification division can be further subdivided. The administrator sets three subdivisions for the values -5, -4 to -3, and -2 to 0. Each subdivision value has a specific definition:

- -2 to 0: Family receives little or no income
- -4 to -3: Income and/or budgeting skills are limited to the point that the family is unable to meet its basic needs
- -5: The family is unwilling or unable to plan or save

A recommendation can also be configured for sub divisions.

Adding Recommendations

A recommendation can be configured such that an activity is suggested by the system to the case worker when a client achieves a particular classification/ classification subdivision. Recommendations are displayed in the Activity Workspace in the outcome plan when clients are assessed and recommendations have been configured for the assessment which has been run.

For example, an administrator can configure that a counseling service can be recommended if a client scores a classification of 'Need' on the substance abuse factor. Alternatively, recommendations can be configured at a more granular level such that an administrator can configure that a substance abuse day treatment program is recommended if a client scores a value of -5.

Recommendations can be created for services, referrals and actions.

An action can be selected from the action drop down. For more information on configuring actions see "Configuring Actions" on page 22 of this guide.

A recommendation and reason can be specified for the recommendation. A recommendation indicates whether the case worker is advised to add the recommended activity to the outcome plan for a client or whether it is discretionary to add the activity to the outcome plan. The reason indicates why an administrator thinks the recommended activity should be added to the outcome plan.

The Select Programs list can be used to filter out recommendations depending on the programs/benefits a client is receiving. For example, an administrator can specify that an action to give a client a bus pass is not recommended if a client is receiving mileage reimbursement. Recommendations are not filtered out of the box but a hook has been provided which allows an agency to customize their own filtering rules or recommendation conditions can be used to perform filtering.

Associating Assessments with Cases and Outcome Plans

Assessments can be associated with cases and outcome plans. This allows the administrator to configure which assessments can be run from a particular case. This includes integrated cases, service plans, benefit products, liability products,

social enterprise folders and outcome plans. For example, a Self Sufficiency assessment may be applicable to a Self Sufficiency outcome plan but not a Reunification outcome plan. Once the case has been associated with an assessment, case workers can then run the assessment for any cases of that type. Two additional settings are provided: The On Home Page setting dictates whether assessment results are displayed on the home page of the associated case. This allows an administrator to display the most pertinent assessment results on the home page of the case. The Assessment Available From dictates where an assessment can be run from within an outcome plan i.e. the assessment can be run from within a review of an outcome plan, it can be run from within the outcome plan itself or it can be run from within a review and from within the outcome plan. For example, the ability to run a Risk Reassessment should only be provided from within a review.

Configuring Outcome Plans

Introduction

This chapter provides an overview of the configurations available for defining outcome plans in Outcome Management administration. Outcome Management allows agencies to define different types of outcome plans. Once outcome plans have been defined, plans can be created to identify and address client needs. There are five main aspects to configuring an outcome plan:

- configuring outcome plan goals
- configuring outcome plan objectives
- configuring outcome plan factors
- configuring outcome plan types
- configuring actions
- configuring progress
- configuring recommendation conditions

Note: services can be added to outcome plans. For more information on configuring services see the Cúram Provider Management Guide.

Configuring Goals

Goals can be defined by an administrator and then shared across multiple types of outcome plans. Once configured, a goal can then be added to an outcome plan by a case worker.

The name must be specified, for example, "Self Sufficiency", "Reunification", "Maintain Employment". A reference can be specified which allows the goal to be referenced in code.

Configuring Objectives

Objectives can be defined by an administrator and then shared across multiple types of outcome plans. Once configured, an objective can then be added to an outcome plan by a case worker.

The name must be specified, for example, "Improve Basic Education" or to "Stay Clean and Sober". A reference can be specified which allows the goal to be referenced in code.

Configuring Outcome Plan Factors

A factor can be defined which does not form part of a larger assessment as described in Chapter 2 Configuring Assessments. For example, General Education Diploma (GED) assessments are often outsourced to third party providers. The third party provider sends the result of the assessment back to the agency. The result can then be recorded by the case worker. Unlike factors described earlier, a question script is not needed since the agency will not be asking the questions of the client. As a result of this neither a CER rule set or CDA Matrix is required. Only categories and classifications must be defined for each factor which will allow the case worker to record the appropriate result for the assessment of the factor.

As with factors within an assessment, an outcome plan factor must be categorized as either a need or barrier. A reference can be specified which allows the goal to be referenced in code.

A Rating Interval can be specified which represents the frequency at which this factor should be reassessed (rated) and is used to calculate a next assessment date for this factor. For example, the rating interval of a GED assessment factor is 30 days. If a result was recorded for this factor on 01/01/2011, the next date a result should be recorded is on the 31/01/2011.

The Planning Applicable indicator specifies whether the factor is involved in the planning aspects of the outcome plan. If the indicator is set to true, the factor will be available for selection when the case worker is adding an objective or activity to the outcome plan. If the indicator is set to false, the factor will only be displayed on the factors list on the outcome plan, and will not be displayed when the case worker is adding an objective or activity to an outcome plan, or in the activity workspace for the outcome plan.

Once the factors are created classifications and recommendations can be defined for an outcome plan factor. See "Adding Recommendations" on page 15 for information on adding recommendations.

Defining Outcome Plan Factor Classifications

Classifications can be defined for an outcome plan factor. Classifications for outcome plan factors define the results that a case worker can select from when recording results for a client for a factor. Unlike classifications for assessment factors, the classifications do not need to be associated with a category.

The classification can be selected from the Name drop down on the above page. These values are stored in the Classification Division Type code table. See "Adding A New Classification To The Classification Code Table" on page 9 for information on this code table.

As with assessment factors, Initial Warning Number of Days and Escalation Number of Days can be specified for outcome plan factor classifications. Outcome plan factors can be prioritized within an outcome plan and as such notifications can be sent based on the configurations below if a priority factor has not been dealt with appropriately. See "Configuring The Initial Warning Number Of Days" on page 10 and "Configuring The Escalation Number Of Days" on page 10 for more information.

A definition, guidance text and recommendations can also be defined for outcome plan factors. See "Adding Definitions And Guidance" on page 14 and "Adding Recommendations" on page 15 for more information.

Note: Classification subdivisions are not provided for outcome plan factor classifications as more granular values can be added to the Classification Division Type code table if necessary.

Configuring Outcome Plan Types

Outcome Management provides the ability for organizations to configure multiple types of outcome plans which can be used to address a client(s) needs. For example, a Self Sufficiency plan can be defined to help a client return to work. A Reunification Plan can be defined to reunite a family who have been separated because of substance abuse issues in the home.

Each outcome plan type can define it's own set of goals, objectives and factors such that only the appropriate goals, objectives and factors can be selected for a type of outcome plan. For example, a goal of Return to Work could be associated with a Self Sufficiency outcome plan where as a Return Home goal would be associated with a Reunification Plan.

This section outlines the configuration options available for an outcome plan and how to associate goals, objectives, factors, recommendations and cases with an outcome plan.

Defining Goals Applicable to an Outcome Plan

The Goals Applicable To drop down list allows an administrator to define the level at which a goal can be added to an outcome plan in the case worker application. The options available are 'Outcome Plan Only', 'Clients Only', 'Outcome Plan and Clients'. Specifying 'Outcome Plan Only' means that a goal can be created at the outcome plan level only. Specifying 'Clients Only' means that a goal can only be created for clients on the outcome plan, a goal cannot be added at the outcome plan level. Specifying 'Outcome Plan and Clients' means that a goal can be added at either the outcome plan level or for a client on the outcome plan.

Defining A Home Page

A home page can be specified such that the default outcome plan home page can be overridden to use a different home page.

Agreement Approval Checks

Agreement approval checks determine the percentage of outcome plan agreements that must be reviewed by a case supervisor. For example, an approval check can be set up such that 50% of agreements submitted for approval will require manual approval; the other 50% will be automatically approved.

Agreement approval checks can be set up for outcome plan, an organization unit, and a user level. Creating approval checks for a user governs agreements submitted by a particular user; creating approval checks for an organization unit governs agreements submitted by all users assigned to positions in that organization unit; creating approval checks at the outcome plan level governs all agreements submitted on outcome plans of that type (across all users). At the organization unit and user levels, an administrator must specify whether the approval check should apply to a single outcome plan or to all outcome plans.

When an agreement is submitted for approval by a user, the system first checks the user's agreement approval check information. If no agreement approval checks exist at the user level, the system then looks for any agreement approval checks for the organization unit that the user belongs to. If there are no agreement approval checks for the organization then the system checks the agreement approval checks at the outcome plan level.

Assigning An Ownership Strategy

When an outcome plan is created the owner of the outcome plan is automatically assigned to the user creating the outcome plan. If an agency wants to define their own outcome plan ownership processing the default processing can be overridden by specifying an ownership strategy when creating an outcome plan. The Ownership Strategy list allows an administrator to select a work flow which can be used to assign an owner to an outcome plan instead of using the default processing.

Multidisciplinary Team Configuration

An outcome plan can be configured such that a multidisciplinary team can be assigned to the plan. This section outlines the configuration options available.

Multidisciplinary Team Type: Multidisciplinary team configurations allow an administrator to define the type of multidisciplinary team that can be added to an outcome plan. A 'Predefined Team' or an 'Ad hoc' team can be selected from the multidisciplinary team type drop down list. If the 'Predefined Team' is specified, a case worker must select from a list of teams that have been pre-configured in multidisciplinary team administration when adding a multidisciplinary team to an outcome plan. If 'Ad hoc' is specified, a case worker can add individual multidisciplinary team members to the outcome plan.

See the `Cúram Social Enterprise Collaboration Configuration Guide` for more information on configuring multidisciplinary teams.

Enabling Sharing: When a multidisciplinary team is added to an outcome plan, information can be shared with the members of the multidisciplinary team and can be accessed by them in the multidisciplinary team portal. For example, a case worker can specify that certain multidisciplinary team members can view certain notes and attachments from the portal. In some cases, an agency may not want to share information in this way and as such the Sharing Enabled indicator allows an administrator to dictate if information is shared with multidisciplinary team members or not. If the Sharing Enabled indicator is off, a case worker will not be provided with the ability to share information with multidisciplinary team members and therefore no information is visible in the portal for the selected outcome plan. If the Sharing Enabled indicator is on, a case worker will be given the option to share certain information with multidisciplinary team members. The information that can be shared is configured in multidisciplinary team member administration. For more information see the `Cúram Social Enterprise Collaboration Configuration Guide`.

Portal Home Page: When information is shared from an outcome plan, it is accessed in the multidisciplinary team portal. Because information from social enterprise folders (SEF) and Investigation cases are also viewable in the portal it is necessary for each case type to have their own home page since each case contains different information. A default home page is provided out of the box for a SEF, investigation and an outcome plan. However, if an agency wants to override the default home page, a different home page can be defined for an outcome plan using the Portal Home Page field.

User Creation Options

An action, factor and objective can be added to an outcome plan without the need to administer them in outcome management administration. Some agencies may not want case workers to add these type of user defined items since they are difficult to report on and agencies may want to use a more standardized approach to outcome planning. To cater for this the Create Action, Create Factor and Create

Objective indicators allow an administrator to dictate if a case worker can add these types of user defined items. If the Create Action indicator is switched on, a case worker will be allowed to add user defined actions to an outcome plan; if it is switched off an action will have to be selected from a pre-defined list of actions. If the Create Factor indicator is switched on, a case worker will be allowed to add user defined factors to an outcome plan; if it is switched off a factor will have to be selected from a pre-defined list of factors. If the Create Objective indicator is switched on, a case worker will be allowed to add user defined objectives to an outcome plan; if it is switched off an objective will have to be selected from a pre-defined list of objectives.

Review Options

The date that the first review should take place on an outcome plan can be configured using the First Review (days) field. This is used in combination with the outcome plan creation date to derive a next review date. For example, if this field is set to 30 days, and an outcome plan was created on the 01/01/2011, the next review date (the first review) will be set to 31/01/2011.

Additionally a review frequency can also be specified which allows an administrator to dictate the next review date for subsequent reviews. The Frequency is used in conjunction with the Frequency Calculation drop down list. The Frequency Calculation can be based on the 'Scheduled Date' or the 'Previous Review Completion Date'.

For example, if the review frequency is set to 7 days and the first review date is scheduled for the 01/01/2011, the next review date is 08/07/2010 if the next review date is based on the 'scheduled date'. Alternatively, if the next review date is based on the 'Previous Review Completion Date' and the previous review was completed on the 02/07/2010, the next review date is 09/07/2010.

Note: If the review frequency calculation has been set to 'Previous Review Completion Date', and a previous review does not exist the next review date is based on the 'scheduled date'.

Visits

The administrator has the option to indicate whether visitation plans and visits are applicable to the outcome plan. Visitation plans allow a caseworker to specify and describe planned interactions that occur between individuals, for example, for Child Welfare, visitation plans describe those interactions between the child in out-of-home placement and family members (parents or relatives) or other participants. If visits are configured for an outcome plan, the Visits tab will be displayed on an outcome plan and visitation plans and visitation logs can be created and the caseworker can also evaluate visits as part of a review.

Visits are evaluated as part of the plan review process. To assist the caseworker in performing visit evaluations, the system calculates visit compliancy and displays a compliancy level for each client and visitor who are part of a visitation plan which overlaps with the applicable review period. The system calculates the compliancy of actual visits against the planned visits set out in a visitation plan. In order to calculate compliancy, a number of factors are taken into account, such as the duration of the visit, reschedule reasons for rescheduled visits and method of contact. Some of these factors, namely method of contact, frequency of visits and expected duration, are specified on the visitation plan. There are also a number of configuration settings, including acceptable duration, compliancy levels and reschedule reasons, that are used in the compliancy calculation.

The acceptable duration is set for an outcome plan type. This configuration is provided for the administrator to set the percentage of the visit duration that is acceptable for compliancy purposes. For example, if the acceptable duration is set to 50%, and the expected duration set out in the visitation plan is 1 hour, any visits that occur for that visitation plan, that have a duration of 30 minutes or more, will be considered compliant from a duration perspective. Any visits that are less than 30 minutes will not be considered compliant and will be excluded from the compliancy calculation.

The administrator can also specify the upper and lower age limits for the clients to be visited for an outcome plan. For example, on a Child Welfare plan, where visit criteria between caregivers and children are set out on a visitation plan, the lower age limit may be set to 0 and the upper age limit may be set to 21, so that only the children aged 21 and under can be added as clients to visit on the visitation plan.

Associating Goals
One or more goals can be associated with a type of outcome plan. The associated goals are then selectable when a case worker adds an outcome plan goal or a client goal to an outcome plan.

Associating Objectives
One or more objectives can be associated with a type of outcome plan. The associated objectives are then selectable when a case worker adds an objective to an outcome plan.

Associating Factors
One or more factors can be associated with a type of outcome plan. The associated factors are then selectable when a case worker adds a factor to an outcome plan.

Configuring Recommendations
Recommended activities can be defined for an outcome plan. Recommending activities for an outcome plan means that the recommended activities will be displayed to a case worker in the outcome plan activity workspace when an outcome plan has been created. Adding recommendations to an outcome plan is the same process as adding recommendations to a factor classification. See "Adding Recommendations" on page 15 for information on adding recommendations.

Configuring Compliancy Levels And Reschedule Reasons For Visits
If visits are applicable for an outcome plan, the administrator can specify compliancy levels and associate percentage ranges for each compliancy level. The configured ranges are used to determine which level to display when a case worker is evaluating visits during a plan review.

For example, the following levels and ranges may be specified:
- Rarely falls between 0-25
- Sporadically falls between 26-50
- Routinely falls between 51-75
- Totally falls between 76-100

If a case worker is carrying out a review for a period of one week, and the visitation plan specifies that two visits are to occur each week. If two compliant visits occurred in the week, the compliancy level would be Totally. If one

compliant visit occurred in the week, the compliancy level would be Sporadically (i.e. 50% compliant). If no compliant visits occurred, the compliancy level would be Rarely (i.e. 0% compliant).

The administrator can also indicate the reschedule reasons that are considered acceptable from a compliancy point of view. This configuration is used to determine if a rescheduled visit is compliant. If the visit was rescheduled for an acceptable reason, for example, Chronic Illness, the visit may be considered compliant subject to other compliancy criteria being met such as the duration of the visit and the method of contact. If the visit was rescheduled for an unacceptable reason, for example, Overslept, it will be considered non compliant.

Configuring The Printable Document Content

The case worker has the ability to view a printable document, which contains information on items such as goals, objectives, assessments, activities, etc. associated with the outcome plan. The case worker can select which content items to include each time he or she selects to View Printable Document. The administrator can configure the content items that are available for a case worker to include in printable documents for an outcome plan type. For example, if objectives are not relevant to the outcome plan type, the administrator can select to exclude objectives so that they are never available for the case worker to select for inclusion in the document.

Customers are free to replace the out of the box printable document with a custom version. Customizing the printable document is a development activity. A hook is provided that allows customers to implement their own document. See the JavaDoc for more information.

Associating Cases

Integrated cases can be associated with outcome plans. Associating integrated cases with outcome plans allows an administrator to dictate the types of integrated cases from which an outcome plan can be created.

Configuring Actions

An action is a type of activity that can be added to an outcome plan. Once an action is defined in outcome management administration, it can be added to an outcome plan to address client needs. Unlike goals, objectives and factors, actions do not have to be associated with a type of outcome plan.

A name must be specified when creating an action. A reference can be specified allowing the action to be referenced in code. The remaining action configuration options are outlined below.

Multiple Clients

The Multiple Clients indicator allows an administrator to define whether a single client or multiple clients can be selected when adding the action to an outcome plan. If this indicator is switched on, multiple clients can be added to the action. A multi select list is provided when adding the action to an outcome plan which allows multiple clients to be selected. If this indicator is switched off, only one client can be selected when adding an action to an outcome plan. A drop down list is displayed allowing only one client to be selected.

Client Participation

The Client Participation indicator allows an administrator to define whether participation needs to be specified when creating an action on an outcome plan. When this indicator is switched on, a frequency and duration are displayed and

must be specified when adding an action to an outcome plan. This indicator also allows actual participation to be recorded for an action. When this indicator is switched off, participation cannot be recorded on the action i.e. a frequency and duration are not displayed when creating the action and actual participation cannot be recorded for the action.

Responsibility

The Responsibility drop down list allows an administrator to define how responsibility is assigned to an action. Four values are available for selection: 'User Creating Action', 'Any User', 'Client', 'Either User or Client'.

If 'User Creating Action' is specified, the responsibility of the action is automatically assigned to the user who is adding the action to the outcome plan.

If 'Any User' is specified, the responsibility can be specified by the user creating the action. The user will be able to search for a user when adding the action to the outcome plan.

If 'Client' is specified, the responsibility can be specified by the user creating the action. The user will be provided with the ability to select from a list of clients when adding the action to the outcome plan.

If 'Either User or Client' is specified, the responsibility can be specified by the user creating the action. The user will be provided with the ability to search for a user or select from a list of clients when adding the action to the outcome plan.

Owner

The Owner drop down list allows an administrator to define how the owner is assigned to an action. Two values are available for selection: 'User Creating Action', 'Any User'.

If 'User Creating Action' is specified, the owner of the action is automatically assigned to the user who is adding the action to the outcome plan.

If 'Any User' is specified, the owner can be specified by the user creating the action. The user will be able to search for a user when adding the action to the outcome plan.

Cost Model and Fixed Cost

The Cost Model drop down list allows an administrator to define the cost associated with the action. Three values are available for selection: 'No Cost','User Specified Costs', 'Fixed Actual'.

If 'No Cost' is specified, it means that there is no cost associated with the action and as a result no cost information is displayed for this action on an outcome plan.

If 'User Specified Costs' is specified, it means that the estimated and actual cost can be specified by a user when creating and completing the action. An estimated cost field is displayed when adding the action to an outcome plan allowing a user to specify the estimated cost of the action. An actual cost field is displayed when completing the action allowing a user to specify the actual cost of the action.

If 'Fixed Actual' is specified, it means that a fixed cost is associated with the action. If this is specified, a fixed cost must be specified when administering the action. This cost is then displayed to a user when adding an action to an outcome plan.

Security Identifiers

When a user attempts to perform particular operations on an action, the system will check to ensure the user has the appropriate privileges to perform a particular operation. A number of security identifiers (SIDs) can be defined, and if specified, must be included in a users profile before they can perform the associated action. The following table outlines the SIDs that can be specified for an action.

Table 2. Action SIDs

SID	Description
Create SID	If specified a user must have this SID in their security profile to create the action.
Modify SID	If specified a user must have this SID in their profile to modify the action.

Batch Process

Cúram Outcome Management provides a batch process, StartEffectiveOutcomePlanActions, which automatically updates the status of actions which have not been started. It processes actions with a start date in the past, a blank or future end date, and a status of 'Not Started', and updates the status of these actions to 'In Progress'.

The batch process can be executed from the Batch Process section of the System Administration application. When executing the batch process, the user can enter the date to use when checking the start date of the actions. If this is not set, the current date is used.

For more information on executing batch processes, see the `Cúram Operations Guide`.

Configuring Progress

The progress values that can be selected by a case worker when recording progress on an outcome plan must be defined in administration. An icon can also be configured for each value which is displayed when the associated progress value is recorded for a client on the outcome plan.

The Value must be specified and represents the progress values that can be selected by a case worker on an outcome plan, for example, 'Good', 'Bad', 'Excellent'. The Resource Name represents the name of the icon selected in the Icon field and is required so that the icon can be stored in application resources.

Configuring Recommendation Conditions

Recommendation conditions can be used to filter the recommended activities on an outcome plan, such that only those recommendations where the client satisfies the related condition are displayed. A condition can be based on gender, age, an assessment question and answer, or rule set. A condition is first defined and then associated with an activity so the same conditions, once defined, can be associated with multiple activities. For example, James Smith (age 38) is classified as having a Need in Substance Abuse. Adolescent Substance Abuse Treatment and Adult Inpatient Substance Abuse Treatment activities have been configured as recommendations for clients classified as having a Need in Substance Abuse. A condition has been associated with Adolescent Substance Abuse Treatment such that it is only recommended if the client is between the ages of 16 and 17. A condition has been associated with Adult Inpatient Substance Abuse Treatment such that it is only recommended to clients over the age of 18. As a result of the

age conditions associated with Adolescent Substance Abuse Treatment and Adult Inpatient Substance Abuse Treatment, only Adult Inpatient Substance Abuse Treatment is recommended for James as he is over the age of 18.

Conditions can be grouped together into condition sets to allow for more complex condition processing, for example, a condition set can contain a condition for gender and a condition for age. For example, James Smith is classified as having a Need in Substance Abuse. Adolescent Substance Abuse Treatment and Adult Inpatient Substance Abuse Treatment have been configured as recommendations for clients classified as having a Need in Substance Abuse. A condition has been associated with Adolescent Substance Abuse Treatment such that it is only recommended if the client is between the ages of 16 and 17. A condition set has been associated with Adult Inpatient Substance Abuse Treatment such that it is only recommended to male clients over the age of 18. Based on this condition, Adult Inpatient Substance Abuse Treatment is recommended for James as he is over the age of 18 and is a male.

System Properties

A number of system properties are provided to allow certain aspects of an outcome plan to be configured. This section outlines these properties.

Configuring Colors In Factor Graph

The application property curam.outcomeplanning.factorGraphRGBColor indicates the color of the graph displayed for a factor within an outcome plan. The default value for curam.assessmentplanning.progressGraphRGBColor is F0A41D.

Configuring Referrals To Appear In Agreements

The application property curam.outcomeplanning.referralForAgreementDays defines the number of days before the current date that a referral should be displayed in the agreement creation wizard. For example, if the configuration specifies 60 days then only referrals that have been created in the last 60 days are available for selection within the agreement.

Configuring The Agreement Issue Method

The application property curam.outcomeplanning.issueAgreementMethod dictates how an outcome plan agreement can be issued. The possible values are 'email', 'post' or 'email or post'. The default value is 'email or post'.

Configuring The Agreement Document Name

The application property curam.outcomeplanning.issueAgreeementDocument dictates the name of the document issued to the clients and signatories of an agreement. The default value is 'Agreement'.

Configuring Whether To Issue Agreement

The application property curam.outcomeplanning.issueAgreeementDocument dictates whether the agreement is issued automatically to clients and signatories of an agreement.

Configuring My Next Review Number Of Days

The application property curam.outcomeplanning.myNextReviewsNumberOfDays is used to define the default value used for the number of days filter on the My Next Reviews summary view.

Configuring Application and Portal Links in Emails

The application property curam.ise.impl.MDTPortalHomePage is used to define the multidisciplinary team portal link(used to login to the portal) to be included in emails sent to external multidisciplinary team members when a note, attachment or activity is added to an outcome plan.

The application property curam.ise.impl.ApplicationHomePage is used to define the application link(used to login to the application) to be included in emails sent to agency workers when an activity has a note or progress added to it by an external multidisciplinary team member through the multidisciplinary team portal.

Configuring Whether To Display Compliant Visitation Logs Only As Part Of A Visit Review

The application property curam.outcomeplanning.displayCompliantLogsOnly dictates whether only compliant visitation logs are displayed to a case worker during a plan review, or whether all visitation logs, including non-compliant logs, are displayed.

Outcome Plan Security

Outcome Management leverages the case security check functionality to allow for case security checking to be performed on an outcome plan. There is no security check in place out of the box, however a hook is provided that allows customers to implement their own security processing for an outcome plan case. Implementing custom security processing for an outcome plan is a development activity. See the JavaDoc for more information.

Using Dynamic Products With Outcome Management

Introduction

Outcome Management uses *service deliveries* to deliver CPM registry based services to clients. Service deliveries are appropriate where there are no additional eligibility requirements (other than the fact that the client is already eligible and in receipt of a primary benefit, e.g. TANF) and payment for the service is based on receipt of either an invoice or attendance roster from a provider. However, not all services can be delivered in this manner. Some services may have their own eligibility criteria in addition to that of the primary benefit. Other services may pay the client directly rather than pay the provider. To accommodate these types of services, outcome management supports the delivery of services using product deliveries which optionally integrate with CPM service authorization and invoice processing.

These types of product delivery are a combination of the features of a standard product delivery and a standard service delivery. This allows case workers to utilize product delivery features, such as evidence management, eligibility determination and financial processing along with functionality that is specific to service deliveries such as, provider selection, provider enquiries, reviews, progress reporting and if required for the service, payment based on receipt of an invoice or attendance roster from a provider. Any CPM based service can be configured to use a product delivery rather than a service delivery to provide the service to clients. For detailed information on configuring services, see Section 3.8 of the Cúram Provider Management Guide.

Cúram v6 introduces the concept of dynamic products. These are products that can be implemented purely by configuration using the Cúram Administration

Application. Typical development activities such as Java coding, UIM development and compilation are not required. A more detailed description of dynamic products is beyond the scope this document. Please refer to the dynamic products documentation for more details.

Dynamic products are delivered using product delivery cases. Therefore, they can be used to deliver the types of service that cannot be delivered using service deliveries. For instance, a service such as Mileage Reimbursement may be delivered using a dynamically configured product delivery. This type of service is not suitable for delivery using the standard service delivery functionality as it is a payment made to a client based on the amount of mileage the client has traveled to attend work related activities; service deliveries pay a provider based on an invoice or an attendance roster. In addition, there is evidence that must be captured (the distance traveled etc.) and rules that are executed to determine the amount to be payed (the rate may vary depending on the mileage claimed) to the client. The dynamic evidence editor is used to add the mileage reimbursement evidence set and the CER Rules Editor is used to add the rules to determine the amount to be paid (please refer to the appropriate documentation for detailed information on these tools). The remainder of this section outlines the steps that need to be undertaken in order to configure a dynamic product, such as Mileage Reimbursement, to be delivered as a service from an outcome plan.

Configuration

Step 1: Login to the *Cúram Administration Application*.

Step 2: Open the *Rules and Evidence* shortcuts panel section in the *Administration Workspace*.

Step 3: Click on the *Dynamic Evidence* link. Add the required dynamic evidence tables and user interface using the *Dynamic Evidence Editor* (A detailed description of the use of the editor is beyond the scope of this document. Please consult the appropriate documentation for more detail). Ensure that you activate the evidence when you have completed the evidence definition and user interface specification.

Step 4: Click on the *Cúram Express Rule Sets* link in the shortcuts panel. Add a new rule set and use the *CER Rules Editor* to add the appropriate rules (A detailed description of the use of the editor is beyond the scope of this document. Please consult the appropriate documentation for more detail). Make sure that you publish the rule sets when you are finished implementing the rules in the rules editor.

Step 5: Open the *Case* shortcuts panel section and click on the *Product Delivery Cases* link. Use the *New* link to add a new product using the *New Product* wizard. Associate the evidence and rules added in the previous steps with the new product by opening the product in a new tab and navigating to the *Evidence* and *Rules* navigation bar tabs respectively. You now have defined a product delivery that can be used to deliver benefits to clients. However, at this stage the product delivery cannot be used with an outcome plan. The following steps detail how the product delivery can be delivered as a service from an outcome plan.

Step 6: Open the *Provider Management* section in the shortcuts panel and click on the *Service Offerings* link.

Step 7: Click on the *New Service Offering* link. Enter service offering configuration information to meet the needs of your service in the New Service Offering dialog

that is opened. In order to use the product defined in the step 5, you must set the value of the *Delivery Type* field. This should be set to *Product Delivery, Product Delivery with Invoicing or Service Delivery with Eligibility*, all of which use product delivery processing. Use the *Product* field to open a product selection dialog where you can select the product created in step 5. Your product is now configured to be delivered as a service from an outcome plan.

Configuring CDA Assessments

Introduction

This appendix details the steps that must be undertaken in the Cúram Administration Application to configure an assessment that uses Cúram Decision Assist (CDA) to produce results that lead to activity recommendations for use in an outcome plan. As outlined earlier in this document, CDA is used when the rules associated with the assessment are not complex. CER is used for more complex assessments where the assessment logic may not be encompassed in the CDA decision matrix. In this example, you will be shown the steps that need to be followed in order to use a CDA based assessment with an outcome plan. These steps are the same regardless of the size and complexity of the IEG script used to capture the answers to the questions and the decision matrix used to determine the assessment results. Therefore, this example will employ a very straightforward IEG script consisting of a single page and question only, and an equally straightforward CDA decision matrix producing a single outcome based on the answer to the question posed in the IEG script. Neither the IEG script or the decision matrix are to be considered as something that could ever be employed in a real world situation. This example does not set out to describe how to use either IEG or CDA. Some information, relevant to the example, will be provided in the use of these tools, however for more detailed information please see the `Cúram Working with Intelligent Evidence Gathering Guide` and the `Cúram Decision Assist Guide`.

This example is based on an assessment used with a back to work type of outcome plan. The assessment is used to determine a client's basic literacy and child care needs.

The answer to the literacy question, "Are you able to read and write and do basic math?" either yes or no, is used to determine the type of activities that should be recommended to the client for literacy on their back to work outcome plan.

The answer to the child care question, "What best describes your child care situation?" is any of the following values, 'Child care not needed', 'Child care unaffordable', 'Child care unavailable, 'Child care is subsidized', which determines the type of activities that should be recommended to the client for child care on their back to work outcome plan.

Configuration

Step 1: Login to the Cúram Administration Application.

Step 2: Open the Decision Assist section in the Shortcuts Panel in the Administration Workspace.

Step 3: Click on the New Questionnaire link and complete the information in the dialog opened by entering a name and selecting a type. Note: specifying an apostrophe in the name of the questionnaire is not supported.

Step 4: A tab should be opened for the newly created questionnaire. Use the tab actions menu to release the questionnaire. This must be done in order for the questionnaire to be available in step 22.

Step 5: Use the New Outcome link in the Decision Assist Shortcuts Panel section to add the outcome that will produced from the decision matrix. Enter the outcome name and specify the outcome type in the dialog displayed. For this example, add an Education outcome and a Child Care outcome for this back to work assessment.

Step 6: Log out of the Cúram Administration Application and login to the Cúram System Administration Application.

Step 7: Open the Application Data section in the Shortcuts Panel in the System Configurations.

Step 8: Click on the Code Tables link and select the New button and enter the code table name. In this example, enter the name Child Care Reason for the new code table.

Step 9: Open the new code table just created and add the code table items by selecting New Item from the action menu.

Step 10: On the New Code Table Item modal specify the Code, Description and Sort Order and select the Selectable checkbox.

Step 11: For this example, enter four codetable items for the Child Care Reason code table, 'Child care not needed', 'Child care unaffordable', 'Child care unavailable', 'Child care is subsidized'.

Step 12: Open the code table list and select to Publish the code table changes.

Step 13: Log out of Cúram System Administration Application.

Step 14: Login to the Cúram Administration Application.

Step 15: Open Intelligent Evidence Gathering section in the Shortcuts Panel in the Administration Workspace.

Step 16: Click on the Datastore Schemas link and select the New button and enter the datastore name. This datastore is required to define any new domains (i.e. they don't exist in IEGDomains schema) required for your assessment, for example if new code tables are required for the answers to the assessment questions. Recommend naming this datastore after the assessment and append the text 'Domains', for example, BackToWorkDomains.

Note: A datastore will automatically be created when a CDA question script is created and both the script and datastore are under version control. This generated datastore should just be used to define your entities and attributes; it should not be used to define new domains. Defining your new domains in this datastore created by CDA will result in the domains being repeated when you start creating new versions of the CDA question script and this will result in errors when you attempt to run your script.

Step 17: Open the datastore editor for the newly created datastore schema by selecting the Edit option from the list action menu for the datastore.

Step 18: Add the IEG domains schema by clicking on the Includes link, select the Include Schema button and select IEGDomains from the dropdown presented.

Step 19: Add a new domain by clicking on the Domains link, select the Add Domain button and enter the name of the new domain, select the parent from the parent drop down and expand the Options cluster and enter the codetable name. For the example, enter CHILDCARE_REASON as the domain name, select IEG_CODETABLE_CODE as the parent and enter ChildCareReason as the codetable (as specified in sys admin).

Step 20: Select to save the schema.

Step 21: Use the Shortcuts Panel to navigate to the Outcome Management section. Click on the CDA Assessment Configurations link to open a page displaying a list of the outcome management CDA based assessments configurations.

Step 22: Click on the New link and enter the name for the CDA assessment configuration. Select the CDA questionnaire created in step 3 and released in step 4 (if the questionnaire does not appear in the drop down it is most likely that you have forgotten to release the questionnaire).

Step 23: Click on the Questionnaire link in the newly created row on the CDA assessment configurations list. A new tab representing the questionnaire should be opened.

Step 24: Use the page actions menu to create a new version of the questionnaire.

Step 25: Use the Edit Question Script menu item from the page actions menu to open the IEG Editor in a new tab.

Step 26: Set the following IEG fields to the values in the table below:

Table 3. IEG Field Settings

IEG Field	Value
Quit Page	AssessmentScript_exit
Finish Page	AssessmentDelivery_executeAssessment
Config Properties	assessment-ieg-config

If you are dealing with a single page assessment (as is the case here), uncheck the Show Progress Bar and Show Sections checkboxes.

Step 27: Click on the Datastore Editor tab in the IEG Editor and select the Includes tab to view the schemas. A schema will already be created by CDA and this will have the same name as the questionnaire with a version number appended.

Step 28: Add the new domain datastore, BackToWorkDomains, that was just created for the assessment domains by clicking on the Includes link, select the Include Schema button and select the BackToWorkDomains datastore from the dropdown presented. On the includes tab, four schemas should now be displayed, IEGDomains, BaseDomains, the new schema which defines your domains, BackToWorkDomains and the schema created by CDA. The IEGDomains is automatically added as it was already included in the BackToWorkDomains datastore. The IEGDomains should not be modified, the new domain schema,

BackToWorkDomains can be modified from here but only to update or add new domains and the schema created by CDA should be used to add the new attributes and entities required for the IEG script.

Note: If a new domain datastore is not required for the assessment, then the IEGDomains schema should be added at this point so that the IEG domains are available for use in the assessment.

Step 29: Add the assessment entities to the datastore created by CDA by selecting the Add Entities button. You will need to add a minimum of two entities; Application and Person. These entities must be added for all IEG scripts used by outcome management assessments and should be added to the datastore created by CDA.

Step 30: Make the Person entity a child of the Application entity by selecting the Application entity, right clicking and select Add Child entity. Select the Person entity from the dropdown.

Step 31: Add the following attributes to the Person entity by selecting the Person entity, right clicking and selecting Add Attribute:

Table 4. Person Attributes

Name	Type
personID	SVR_KEY
firstName	IEG_STRING
gender	IEG_GENDER
dateOfBirth	IEG_DATE
roleID	IEG_INT64
participantID	IEG_INT64
questionsApplicableInd	IEG_BOOLEAN

These attributes must be added for all IEG scripts used with outcome management assessments.

Step 32: Add the assessment specific entities and attributes, i.e. the attributes required to capture the data entered for your assessment. In this example, we want to capture whether or not the client has basic literacy skills. As this is related to the client, we can add a basicLiteracy attribute of type IEG_BOOLEAN to the Person entity. We also want to capture the client's child care situation. This is also related to the client, so we can add a childCareSituation attribute of type CHILDCARE_REASON to the Person entity. (Note: the IEG_BOOLEAN domain is a domain defined in the IEGDomains and CHILDCARE_REASON is a new domain that we defined in the newly created domain schema i.e. BackToWorkDomains).

Don't forget to save the schema document using the menu item provided by the IEG editor.

Step 33: Set up the IEG script by adding a new section. As this is a one question one page script, there is no need to add a page as one is automatically created for the section. Set the title of this page to 'New Assessment' (when running the assessment in outcome management this will mean that the series of screens used for this purpose have a common title). Set the Person entity as the entity to be

used with this page. Add a cluster to the page and set the Person entity as the entity to be used with this cluster. Add a question (Are you able to read and write and do basic math?) to the cluster and set the question attribute to basicLiteracy as below.

Add another cluster to the page and set the Person entity as the entity to be used with the cluster. Add a question (What best describes your child care situation?) to the cluster and set the question attribute to childCareSituation.

Save the script and close the IEG editor.

Step 34: Return to the questionnaire tab opened in step 25. Use the Release menu item from the tab actions menu to release the questionnaire.

Step 35: Return to the list of CDA Assessment Configurations. Select the Add Decision Matrix menu item from the list dropdown menu for the assessment configuration you added in step 24. This opens the Add Decision Matrix dialog. Enter a name, select a type and check the Scoring by Outcome field. If your assessment has multiple outcomes then check the Multiple Outcomes field as well.

Step 36: Click on the Decision Matrix field link in the list for the CDA assessments configuration, to open a tab representing the decision matrix. Select the Edit Matrix menu item from the tab menu to open the decision matrix editor.

Step 37: Click on the Question button in the decision matrix editor. Ensure that the questionnaire entered earlier is selected in the questionnaire dropdown. The questions entered earlier should be displayed in the questions multi-select list. Select both questions to include in the decision matrix.

Step 38: The questions are now displayed in the decision matrix editor. The answer for the question 'Are you able to read and write and do basic math?' is a boolean and the matrix now shows True and False as answers. The possible answers to the question 'What best describes your child care situation?' is based on a code table and the matrix now shows all possible answers.

Step 39: Click on the Options button and Add Score link to add a Scores column to the matrix. Add scores for all answers.

Step 40: Click on the Outcome button and add the outcomes that you defined earlier in step 5 i.e. Child Care and Education. As we are using scoring to determine the result, check the Education Outcome checkboxes for both the True and False answers for the 'Are you able to read and write and do basic math?' question. Check the Child Care Outcome checkboxes for all possible answers to the 'What best describes your child care situation?' question.

Step 41: Validate and Save the changes you have made to the decision matrix. The decision matrix tab should now be open. Use the Release menu item in the tab actions menu to release the decision matrix.

Step 42: Return to the Outcome Management section in the Shortcuts Panel. Click on the Assessment Definitions link to open the list of assessment definitions.

Step 43: Click on the New action to open the dialog below. Enter the name of your assessment and select the assessment configuration created earlier. Select the appropriate categories, in this case Barrier.

Step 44: Click on the name of the assessment you have just entered in the assessment definition list to open a tab for the assessment. Click on the Roles navigation tab and select the New action to add the assessment role. Enter the name of the role, check the Mandatory and Questions Applicable checkboxes.

Step 45: Select the Categories navigation tab. Use the Add Classification menu item from the page actions menu to add two classifications, Strength and Need, for the Barrier category.

Step 46: Open the Factors tab and use the New page menu item to add a new factor. Click on the name link of the factor entered to open a tab representing the factor.

Step 47: Select the Map CDA Outcome tab menu item to open a dialog allowing you to select the CDA outcome defined earlier.

Step 48: Click on the Classifications navigation tab and use the Edit menu item in the list dropdown menu to set the appropriate range for both of the classifications. In this simple example, the range for the strength classification that equates to an answer of yes to the question regarding basic literacy, is set to from 1 to 1 (a value of 1 is returned from the decision matrix in response to an answer of yes to the question). Similarly, the range for the need classification is set to from 0 to 0 as a value of 0 is returned in response to an answer of no to the question.

Step 49: Return to the Outcome Management section in the Shortcuts Panel. Click on the Outcome Plans link and select the New action from the page opened. Enter the name of the outcome plan, in this case Back To Work, and save the changes.

Step 50: Return to the assessment definition tab opened earlier in step 45. Click on the Cases navigation tab and select the Add page link. Select the outcome plan added in the previous step from the list presented. You assessment is now available to be used from within outcome plans of this type.

Configuring A CER Assessment

Introduction

This appendix details the steps that must be undertaken in the Cúram Administration Application to configure an assessment that uses Cúram Express Rules (CER) to produce results that lead to activity recommendations for use in an outcome plan. CER is typically used for more complex assessments where the assessment logic may not be encompassed in the CDA decision matrix. In this example, the reader is going to be shown the steps that need to be followed in order to use a CER based assessment with an outcome plan. These steps are the same regardless of the size and complexity of the IEG script used to capture the answers to the questions and the complexity of the CER rules used to execute the assessment logic. Therefore, this example will employ a very straightforward IEG script consisting of a single page and question only, and an equally straightforward CER rule set producing a single outcome based on the answer to the question posed in the IEG script. Neither the IEG script or the CER rule set are to be considered as something that could ever be employed in a real world situation. This example does not set out to describe how to use either IEG or the CER Rules Editor. Some information, relevant to the example, will be provided in the use of these tools, however for more detailed information please consult the appropriate documentation.

This example is based on an assessment used with a back to work type of outcome plan. The assessment is used to determine a client's basic literacy based on the answer to a single question, "Are you able to read and write and do basic math?". The answer provided to this question, either yes or no, is used to determine the type of activities that should be recommended to the client on their back to work outcome plan.

Configuration

Step 1: Login to the Cúram Administration Application.

Step 2: Open the *Rules And Evidence* section in the *Shortcuts Panel* in the *Administration Workspace*.

Step 3: Click on the *Cúram Express Rule Sets* link to open the rule sets list page.

Step 4: Use the *New* option in the tab Actions menu to create the new rule set. Give it a name and choose a category for the rule set if appropriate.

Step 5: Find your new rule set in the list, and from the list row menu choose the *Continue Editing* menu item. This will open a new tab containing the rules editor.

Step 6: From the panel on the right side, select *Technical* from the dropdown list on the *Tools* tab.

Step 7: Use the *Class* button on the panel to create a new class called *Person*.

Step 8: Select the *Person* class and use the *Attribute* button on the tab to create a new attribute called *roleID*. In the properties panel for the *roleID*, edit its data type by clicking the *Edit* link. Select *Java Class* in the dialog which pops up; enter *Long* as the name and click *Save*.

Step 9: Create another attribute in the *Person* class called *canReadOrWrite*. Its data type will automatically be set to *Boolean*.

Step 10: Use the *Class* button to create a new class called *Factor*. In the properties panel for class, check the *Abstract* checkbox then click on the *Edit* link for the *Extends* field. Use the *Change* link to change the rule set to be *AssessmentRulesInterface* and click *Save*, then choose *AbstractFactor* as the class name and click *Save*.

Step 11: Use the *Rule Class* menu item from the *New* menu to create a new class called *BasicLiteracy*. In the properties panel for class, click on the *Edit* link for the *Extends* field. Select *Factor* as the rule class name and click *Save*.

Step 12: Create a new attribute in the *BasicLiteracy* class called *roleID*. Set its type to be a *Java Class* called *Long*, as with the *roleID* of the *Person*.

Step 13: Create another attribute in the *BasicLiteracy* class called *person*, and set its data type to be the *Rule Class* called *Person*.

Step 14: Double click on the *person* attribute to open its diagram. From the list of palettes on the right of the editor, select the *Technical* palette. Drag a *Search* element from the palette onto the *person* element on the diagram. Select the *Edit Search*

action from the dropdown menu on the *Empty Search* icon. Choose *Person* as the *Rule Class* and click *Save*. In the properties panel, select the *Technical* tab and click the *Single Item* option.

Step 15: Select the *New Match* option in the dropdown menu for the *Search* element.

Step 16: Ensure *roleID* is selected as the attribute and click *Save*. From the dropdown menu for the empty rule reference displayed in the diagram, choose the *Edit Reference* option. In the dialog which pops up, ensure *BasicLiteracy* is set as the rule class, then choose *roleID* from the *Use Existing Rule* dropdown list and click *Save*.

Step 17: Create a new attribute in the *BasicLiteracy* class called *reference* and set its data type to be *String*. Double click on the attribute to open its diagram. From the list of palettes on the right of the editor, choose the *Data Types* palette from the dropdown menu.

Step 18: Drag a *String* element from the palette on to the *reference* element on the diagram. Click on the *String* element and in the properties panel, enter *BASICLITERACY* as the value for the element.

Step 19: Create another attribute in the *BasicLiteracy* class called *score* of type *String*. Double click on the attribute to open its diagram.

Step 20: From the list of palettes on the right of the editor, choose the *Business* palette. Drag a *Choose* element onto the score element. Choose *String* as the type and click *Save*. Drag a *Compare* element onto the *Empty Condition* of the *When* element.

Step 21: Drag a *Rule* element onto the *Empty Member* of the *Compare* element. In the dialog which pops up, choose the *person* rule and click *Next*. Select the *canReadOrWrite* rule from the dropdown list and click *Save*. Select the equals symbol from the dropdown list that links the newly created canReadOrWrite element with the *Empty Member* element.

Step 22: Then, from the *Data Types* palette, drag a *Boolean* element onto the *Empty Member* element. Set its data type to *String*. From the *Data Types* palette, drag a *String* element onto the *Empty Value* for the result of the *When* and enter 1 as its value. Drag another *String* element onto the *Empty Value* for the *Otherwise* element and enter 0 as its value. Save your rule set.

Step 23: Create another attribute in the *BasicLiteracy* class called *classification*. Set its data type to be a *Code Table Entry* from the code table *ClassDivisionType* and click *Save*. Note that you must select the *ClassDivisionType* code table using the *Codetable Name* field.

Step 24: From the panel on the right side, select the *Templates* tab, then select *Decision Table* from the dropdown list. Drag a *Decision Table* element onto the classification element. In the dialog which pops up, click *Next* then select *score* from the *Use Existing Rule* dropdown list and click *Save.*

Step 25: Expand the *Empty Condition* row in the decision table by double clicking on it to view the *Empty Condition* and *Empty Value* elements. From the panel on the right side, select the *Tools* tab and choose *Data Types* from the dropdown list.

Step 26: Drag a *String* element onto the *Empty Condition* element and in the properties panel, enter a value of 1. Drag a *Codetable* element onto the *Empty Value* element and in the properties panel, select the *ClassDivisionType* code table using the *Codetable Name* field. In the *Codetable Value* field, select *Strength* from the dropdown list.

Step 27: Expand the *Otherwise* row in the decision table by double clicking on it to view the *Empty Value* element. Drag a *Codetable* element onto the *Empty Value* element and in the properties panel, select the *ClassDivisionType* code table again using the *Codetable Name* field. In the *Codetable Value* field, select *Need* from the dropdown list. Save the rule set.

Step 28: Create a new *Rule Class* called *FactorList*. In the properties panel, click the *Edit* link for the *Extends* field and set this class to extend from the *AbstractFactorList* class in the *AssessmentRulesInterface* rule set.

Step 29: Create a new attribute in the *FactorsList* class called *factors*. When setting its data type, choose *Rule Class* in the dialog which pops up; select the *List* checkbox, select *Factor* as the rule class then click *Save*.

Step 30: Create another attribute in the *FactorsList* class called *basicLiteracy*. When setting its data type, choose *Rule Class* in the dialog which pops up, select *BasicLiteracy* as the rule class and then click *Save*.

Step 31: Double click on the *factors* attribute to open its diagram. Drag a *Fixed List* element from the *Technical* palette onto the *factors* element on the diagram. In the dialog which pops up, choose *Rule Class* as the list type and select *Factor*.

Step 32: From the *Business* palette, drag a *Rule* element onto the *Empty Member* element on the diagram. In the dialog which pops up, choose *basicLiteracy* as the rule and click *Save*.

Step 33: Double click on the *basicLiteracy* attribute to open its diagram. Drag a *Create* element from the *Technical* palette onto the *basicLiteracy* element on the diagram and click *Save*. From the *Business* palette, drag a *Rule* element onto the *roleID* element on the diagram.

Step 34: Use the *Change* link to change the rule set to be *AssessmentRulesInterface* and click *Save*, then choose *AbstractFactor* as the current rule class name and click *Save*. Select *roleID* from the *Use Existing Rule* dropdown and click *Save*.

Step 35: Save your rule set and close the tab containing the rules editor (you may choose to validate your rule set to ensure that you have followed the steps correctly).

Step 36: On the Cúram Express Rule Sets page, use the *Publish* menu item in the tab menu to publish the new rule set.

Step 37: Use the *Shortcuts Panel* to open the *Intelligent Evidence Gathering* section.

Step 38: Click on the *Datastore Schemas* link and use the *New* menu option from the page opened to add a new schema. Fill in the appropriate fields for the schema.

Step 39: Click on the *Scripts* link in the *Shortcuts Panel* to open the *IEG* scripts list page. Click on the *New* link to create a new IEG script for your assessment.

Step 40: From the IEG scripts page, select the *Open Editor* menu item from the list row actions menu for the newly created script. Select the schema created in step 38 from the drop down of datastores and click on the *Open Editor* button to start editing the IEG script.

Step 41: Select the *Edit* menu option and then *Configure Script Properties*. Set the following IEG fields to the values in the table below:

Table 5. IEG Field Settings

IEG Field	Value
Quit Page	AssessmentScript_exit
Finish Page	AssessmentDelivery_executeAssessment
Config Properties	assessment-ieg-config

If you are dealing with a single page assessment (as is the case here), uncheck the *Show Progress Bar* and *Show Sections* checkboxes.

Step 42: Click on the *Datastore Editor* tab in the IEG Editor.

Step 43: Add the IEG domains by clicking on the *Includes* link, select the *Include Schema* button and select *IEGDomains* from the dropdown presented and click OK.

Step 44: Add the assessment entities by selecting the *Add Entity* button inside the *Entities* section. You will need to add a minimum of two entities; Application and Person. These entities must be added for all IEG scripts used by outcome management assessments.

Step 45: Make the *Person* entity a child of the *Application* entity by selecting the *Application* entity, right clicking and select *Add Child Entity*. Select the *Person* entity from the dropdown.

Step 46: Add the following attributes to the *Person* entity by selecting the *Person* entity, right clicking and selecting *Add Attribute*:

Table 6. Person Attributes

Name	Type
personID	SVR_KEY
firstName	IEG_STRING
gender	IEG_GENDER
dateOfBirth	IEG_DATE
roleID	IEG_INT64
participantID	IEG_INT64
questionsApplicableInd	IEG_BOOLEAN

These attributes must be added for all IEG scripts used with Outcome Management assessments.

Step 47: Add the assessment specific entities and attributes, i.e., the attributes required to capture the data entered for your assessment. In this case, we want to capture whether or not the client has basic literacy skills. As this is related to the client, we need to add a *canReadOrWrite* attribute of type *IEG_BOOLEAN* to the

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Person entity. The title of this attribute must be the same as the title of the same attribute added to the *Person* rule class in the CER editor in step 9. Don't forget to save the schema document using the menu item provided by the IEG editor.

Step 48: Set up the IEG script by adding a new section. When the section is created, a page is automatically created for it. Set the title of this page to *New Assessment* (when running the assessment in outcome management this will mean that the series of screens used for this purpose have a common title). Set the *Person* entity as the entity to be used with this page.

Step 49: Drag and drop an *Add Cluster* element from the right side panel onto the page. In the *Cluster Properties* panel, set the Cluster Title to be *Basic Literacy Skills*. Set the *Person* entity as the entity to be used with this cluster. Drag and drop an *Add Question* element onto the newly created cluster.

Step 50: In the *Question Properties* panel, set the *Question Attribute* to be *canReadOrWrite*. Set the Question Label to be '*Are you able to read and write and do basic math?*' Save the script and close the IEG editor.

Step 51: Use the *Shortcuts Panel* to open the *Outcome Management* section. Click on the *CER Assessments Configuration* link in this section to open the list of CER assessment configurations.

Step 52: Click on the *New* link and populate the dialog that is opened with the appropriate information, i.e., the name of the script, datastore and rule set that you added earlier. As we are using scoring to determine the classification, click the *Scoring* checkbox.

Step 53: Return to the *Outcome Management* section in the *Shortcuts Panel*. Click on the *Assessment Definitions* link to open the list of assessment definitions.

Step 54: Click on the *New* action. Enter the name of your assessment and select the assessment configuration created earlier. Select the appropriate categories, in this case *Barrier*.

Step 55: Click on the name of the assessment you have just entered in the assessment definition list to open a tab for the assessment. Click on the *Roles* navigation tab and select the *New* action to add the assessment role. Enter the name of the role for example, *Primary Caregiver*, and check the *Mandatory* and *Questions Applicable* checkboxes.

Step 56: Open the *Categories* navigation tab. Use the *Add Classification* menu item from the page actions menu to add two classifications, *Strength* and *Need*, for the *Barrier* category.

Step 57: Open the *Factors* tab and use the *New* menu item to add a new factor. Enter *Basic Literacy* as the factor name. Make sure that you enter *BASICLITERACY* in the Reference field (the same value as entered for the reference attribute in the *BasicLiteracy* CER rule class specified in step 18). This is required to map the *BasicLiteracy* CER rule class to the assessment factor. Click on the name link of the factor entered to open a tab representing the factor.

Step 58: Click on the *Classifications* navigation tab and use the *Edit* menu item in the list dropdown menu to set the appropriate range for both of the classifications. In this simple example, the range for the strength classification that equates to an answer of yes to the question regarding basic literacy, is set to from 1 to 1 (a value

of 1 is returned from the rules in response to an answer of yes to the question). Similarly, the range for the need classification is set to from 0 to 0 as a value of 0 is returned in response to an answer of no to the question.

Step 59: Return to the *Outcome Management* section in the *Shortcuts Panel*. Click on the *Outcome Plans* link and select the *New* action from the page opened. Enter the name of the outcome plan, in this case Back To Work, and save the changes.

Step 60: Return to the assessment definition tab that you opened earlier in step 55. Click on the *Cases* navigation tab and select the *Add* link. Select the outcome plan added in the previous step from the list presented. Your assessment is now available to be used from within outcome plans of this type. For information on creating an outcome plan and running an assessment, see the `Cúram Outcome Management Guide`.

Additional Technical Information

Rules Execution

- Pre and post events are raised before and after the assessment rules are executed. This facility allows additional logic to be executed before and after the execution of the assessment rules. The events raised are *AssessmentInstanceEvents.preExecuteAssessment* and *AssessmentInstanceEvents.postExecuteAssessment*.

- Customers have the ability to implement their own assessment engine for executing rules. Out of the box both Cúram Decision Assist and Cúram Express Rules rules can be used as the assessment rule engine. However customers can plug in their own rules engine by injecting an implementation of the *AssessmentConfiguration* interface.

Rules Configuration

- Upon initiation of the CER rules session, rules objects are created from the data captured in the IEG script. The *DataStoreRuleObjectCreator* class is used to create the rule objects and populate the attributes based on name matching of the entities and attributes in the datastore schema used by the IEG script. For more information on how the class operates please see the *DataStoreRuleObjectCreator* section in the CER Cookbook.

- After the above has occurred, Outcome Management executes the rules session as follows:
  - A rules class named *FactorList* is created, this class must contain a attribute named *factors* which contains a list of the factors configured in the rules.
  - For role based assessments the rules are executed for each role that questions were asked of.
  - For group based assessment the rules are only executed once.
  - For each factor configured in the rules set the following occurs:
    - The *roleID* is populated (this is used to retrieve the person class instance that holds all the answers for that role).
    - The *reference* is retrieved for each item defined in the *factors* attribute of the *FactorList* rules class. The reference value is used to find the assessment factor with the same reference value (Step 42 above describes the set up of an assessment factor). If no factor is found matching the reference, this factor is skipped and the processing moves on to the next factor in the list.
    - The *score* attribute is retrieved from the rule set factor class. If scoring is used, this is where the principle assessment logic is executed. Typically, the

rules will use the associated *roleID* to retrieve the answers for that person and determine a score value for the factor based on the answers given.

- The classification is retrieved for the factor. If scoring is used, this can simply be a blank value. If a classification, rather than a score is to be returned, this is where the principle assessment logic is executed. Typically, the rules will use the associated *roleID* to retrieve the answers for that person and determine a classification for the factor based on the answers given. This classification must match one defined for the assessment factor.

- The results for each factor are stored in the *FactorResults* table.

IEG Configuration

- The root entity must be called *Application*.

- After creation of the root entity, there is a hook point that allows population of entity values before the script starts. The event raised is *AssessmentInstanceEvents.prePopulateDatastore* ; *AssessmentInstance* and *RootEntity* are passed to the event as parameters.

- For role based assessments, a *Person* entity is used to store the answers entered by each of the people in the assessment. IEG uses the *Person* entity to loop through a list of people displaying an image for each person at the top of the screen. The following attributes are automatically populated on the *Person* entity before the script starts.

Table 7. Person Attributes

Name	Type
personID	SVR_KEY
firstName	IEG_STRING
gender	IEG_GENDER
dateOfBirth	IEG_DATE
roleID	IEG_INT64
participantID	IEG_INT64
questionsApplicableInd	IEG_BOOLEAN

- For role based assessments, a *Person* entity is used to store the answers entered by each of the people in the assessment. IEG uses the *Person* entity to loop through a list of people displaying an image for each person at the top of the screen. The following attributes are automatically populated on the *Person* entity before the script starts.

Table 8. Person Attributes

Name	Type
personID	SVR_KEY
firstName	IEG_STRING
gender	IEG_GENDER
dateOfBirth	IEG_DATE
roleID	IEG_INT64
participantID	IEG_INT64
questionsApplicableInd	IEG_BOOLEAN

- For group based assessments, a *Group* entity is used to store the answers entered during the script. The *Group* entity must have a *groupName* attribute which is automatically populated upon initiation of the script.
- An optional *Assessment* entity can also be specified in the schema. If it is specified, the following attributes will be automatically populated (if defined):

Table 9. Assessment Attributes

Name	Type	Description
initialAssessmentInd	IEG_BOOLEAN	Indicates if the script execution is an initial assessment or a reassessment. For reassessments the user may be given the option to select the factors that are to be reassessed.
assessmentInstanceID	IEG_INT64	The identifier of the assessment instance currently being executed. This can be used to retrieve any additional information about the assessment.
assessmentDefinitionID	IEG_INT64	The identifier of the assessment definition record contains all the configuration information about the assessment.

- After the *Assessment* and either the *Person* or *Group* entities are populated, an event is raised which allows for the population of further entity attributes before the script is started. The event raised is *AssessmentInstanceEvents.postPopulateDatastore* ; the *AssessmentInstance* and *RootEntity* are passed to the event as parameters.

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