

# Intermediate Rules Virtual Program for Instrument Manager

## Course Description

This is an intermediate level program, utilizing interaction and collaborative work with fellow participants. There will be extensive hands on practice to learn Instrument Manager Rules engine functionality and construction of rules for auto-verification (AV) of patient results. The class covers data elements for special purposes, calculations, AV rules, best practices, complex functions, and rules to help integrate data in the SM Workspace.

## Prerequisites

Participants must understand laboratory workflows and operation of Laboratory Information Systems for transmission of orders and receipt of results from laboratory instrument interfaces. Prior attendance in a Data Innovations Introduction to Rules course or equivalent training is required.

## Course Agenda

### Day One

#### Concepts Review

- Data Flow Overview
- Rule Writing and Message Types
- Rule Placement and Streamlining Rules

#### Operators, Actions, and Data Elements Review

- Extract Component vs. Extract Section of
- Add vs. Set
- Add Test vs. Order Test
- Specimen Indices and Assigning User Fields

#### Rules Testing

- Best Practices for Dry Testing Rules
- Multiple Message Test Scenarios
- Importing Test Cases from Patient Records

### Day Two

#### Calculation Rules

- Cross Analyzer Calculations with User Fields

#### Reruns

- Previous Run Result vs Previous Patient Result
- Using Previous Run Result and Test User Persistent Fields

#### Auto-Verification Rule Sets

- What is AV?
- Validation
- Implementation and Approval Documentation
- Naming Rules and Naming Test Scenarios/Test Cases

#### AV Rules

- Missing Indices

### Day Three

#### Data Collection for AV

- Typical data used in AV rule sets
- Sample spreadsheets for data collection & use in rules writing

#### Converting Workflows to Rule Sets

- Writing and testing rules commonly used in AV sets

#### Writing AV Rule Set Exercise

- Small group activity to construct and test an AV rule set for sample coagulation workflow

### Day Four

#### Writing an AV Rule Set Exercise (cont.)

- Completion of AV Rule Set

#### Complex Functions

- Pattern matching
- Specimen Warning

#### Language Locale

- Renaming User Fields

#### Non-Default Locations

- Writing rules in alternate places along IM data flow