

Implementation of Machine Executable Clinical Guidelines

Partner Brief

Description

The CDSC developed and tested a novel approach to translating clinical guidelines from human readable to machine executable through a series of intermediary specification layers. Level 4 clinical knowledge is encoded in a format that can be rapidly delivered and integrated into a CDS tool on a specific HIT platform.

This approach is a standards-based clinical decision service. The service accepts, via SOAP, a C32-compliant Continuity Care Document (CCD), performs a real time inference and returns an XML result containing clinical recommendations. The application determines how to use and display the received inference.



Approach and Key Steps

Vendors wishing to take part as a CDSC service client will go through key functional steps as outlined below. The amount of time and resources required to achieve each step will depend on the vendor's current ability to generate a compliant CCD and readiness for services implementation. Durations below are based on the CDSC's previous implementation experiences.

1	Generate a CCD compliant with the standard format and terminologies prescribed by the CDSC	
2	Validate data alignment with CDSC standards	
3	Complete legal services and data sharing agreement	
4	Exchange service calls with the CDSC and perform end to end testing	
5	Assure that the application of the CDSC classification processes produce clinical states consistent with the definitions used by the consumer	
6	Assure that the ECRS classification processes produces correct clinical states when there are changes to the underlying terminologies or terminology mappings used by either the consumer or the service provider	
7	End-to-End testing to assure that the ultimate result of calling the CDS web service produces results consistent with those produced by the service provider in response to a given set of inputs	
8	Set up and test connectivity	
9	Identify customer intervention practices (if applicable)	

The CDSC solutions team will provide necessary documentation in order to achieve compliance with consumer responsibilities; however, compliance is ultimately the responsibility of the consumer.

Collaborating with CDSC: Gains/Benefits

- Aligns with MU goals and objectives
- Simplifies customer CDS implementation and knowledge management
- Provides access to cutting edge research and development in the area of CDS

All work will be supported and guided by Enterprise Clinical Rules Services (ECRS) team led by Howard Goldberg, MD, and the study PI, Blackford Middleton, MD. For more information on the CDSC please refer to our website

<http://www.partners.org/cird/cdsc/>