



# PQRI-QRDA Module Development

## Executive Summary

This project was for one of our existing clients, who was interested in developing a module, to be appended with their EMR application. The module to be developed was PQRI-QRDA. PQRI or Physician Quality Reporting Initiative is a government based plan where in each and every physician needs to report 10 quality measure files. Each measure is to consist of a denominator based on CPT, HCPCS, and ICD codes. If the files were found to be in good format then the physicians would be paid. Keeping this objective in mind the client approached Mindfire Solutions to take up the work. As the client had previously worked with Mindfire’s team he was aware of the capability that its team possesses.

File Name	Length(in Bytes)	Display XML File
908938_01_Measure 1_23-03-10_04-53-52.xml	25187	<input type="button" value="View"/>
908938_05_Measure 1_23-03-10_04-54-32.xml	14438	<input type="button" value="View"/>
908938_ERX_Measure 1_23-03-10_04-54-32.xml	14432	<input type="button" value="View"/>

Mindfire’s team took up the challenge and developed a module that populated QRDA (XML) files. The module was developed using ASP.Net 4.0, C# 4.0.

## About our Client

**Client** Healthcare Service Provider | **Location** USA | **Industry** Health Care

## Business Situation

The client had an existing EMR application and his requirement was to develop a module within a short period of time. This module to be developed needs to be integrated with the current system in order to feed correct data to the application.

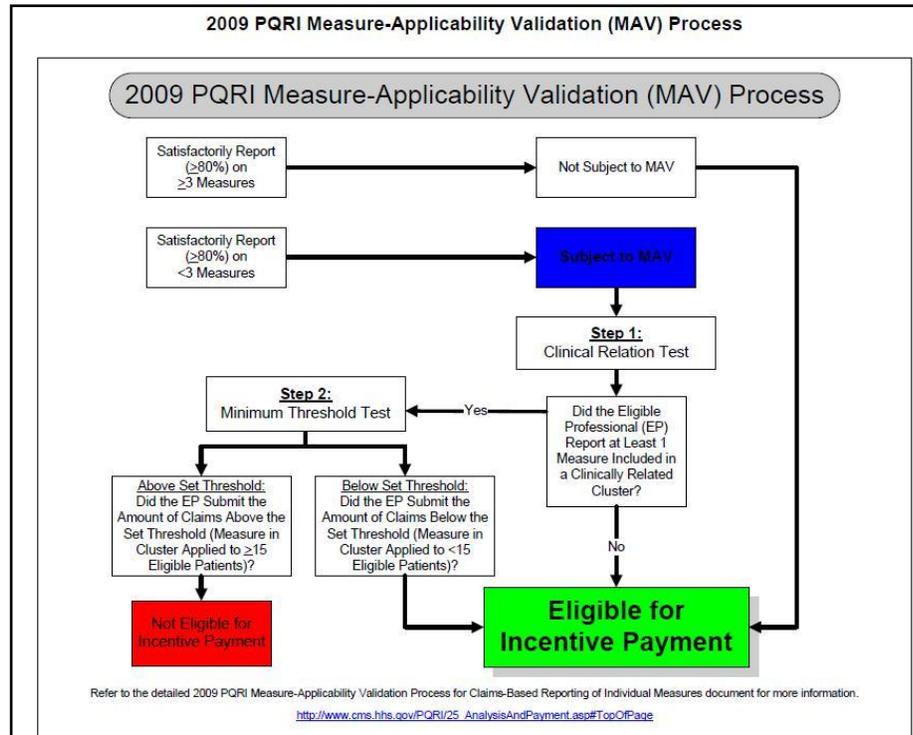
With their current alerting system, physicians can search their database for all patients in the practice who have these specific codes documented within the past 12 months, create a report and then create & send QRDA or Quality Reporting Document Architecture file for each of them. For this the client needs to be focused in order not to miss out any of the values in the QRDA file. There should not remain any scope for errors as Fed rules were to be followed. To get this task done, the client was after developing an automated system, which would avoid manual tasks and can ultimately strike out room for errors while feeding the system.



### Solution Details

## The Mindfire Solution

As this project was to be delivered within a particular time frame, Mindfire’s technical team immediately got involved and designed an architectural flow. This design is shown below:



The above flow diagram illustrates the various conditions, fulfilling which a physician would be eligible to receive the payment.

Basing on this architectural flow, Mindfire’s team could develop the module following all the conditions as provided by the Feds. The module has been appended in the main EMR application in the form of a button which when clicked, would retrieve all the relevant information about patients, and then populate the QRDA files accordingly.

### Achievements

The challenge in the project was its time frame which the development team managed well. As, there was a strict review structure and we had to follow Fed rules there was no scope for us to make any errors. So, we had to be perfect in what we did. There was also a lot of testing procedures to be executed at each level without failing to ensure perfection.



## Technologies

ASP.Net 4.0, C# 4.0, SQL Server 2008

## Final Results Software System

```
<?xml version="1.0" ?>
<ClinicalDocument xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd" xmlns:voc="urn:hl7-org:v3/voc" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="urn:hl7-org:v3">
- <!--
  *****
  CDA Header
  *****
-->
<realmCode code="US" />
<typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3" />
<!-- QRDA Category I generic template ID. -->
<templateId root="2.16.840.1.113883.10.20.12" />
<id root="2.16.840.1.113883.3.249.7.1.5" extension="00d84cda-e365" />
<!-- QRDA document type code (yet to be created). -->
<code code="55182-0" displayName="Quality Measure Report" codeSystemName="LOINC" codeSystem="2.16.840.1.113883.6.1" />
<title>Quality Measure Report</title>
<effectiveTime value="20100323" />
<confidentialityCode codeSystem="2.16.840.1.113883.5.25" code="N" />
<languageCode code="en-US" />
<setId root="2.16.840.1.113883.3.249.7.1.5" extension="db734647-fc99" />
<versionNumber value="1" />
- <!--
  *****
  PERSONAL INFORMATION MODULE
  *****
-->
- <recordTarget>
- <patientRole>
  <id extension="908938" root="2.16.840.1.113883.11.19584" />
  - <addr>
    <streetAddressLine>123 N Main</streetAddressLine>
    <city>Wichita</city>
    <state>KS</state>
    <postalCode>67201</postalCode>
    <country>US</country>
  </addr>
  <telecom value="tel:+1-316-555-1234" use="HP" />
  </patientRole>
- </recordTarget>
- </ClinicalDocument>
```

## Customer Benefits

The module helped the client in many ways. It not only reduced their margin of making any error, but also added value to their system. The clients even got paid for this.

## Future relationship

This was the second time that the client was involved in a project with us which made him more confident on Mindfire's ability to deliver under strict circumstances. He was very happy with the way the team delivered and assured Mindfire of carrying out his future projects with us.

