Clinical Customer Defined Query Responses (CCDQR) refers to segments in ADM.PAT used to store the “last documentation of a query” (see Appendix A). ADM.PAT.ccdqr.response and ADM.PAT.ccdqr.mult.response are popular fields from these segments used on NPR Reports and CDS Attributes. In fact, almost every report example showing how to get a query response from clinical documentation uses these fields. However, using these fields may produce results that are less than desirable. This article provides a detailed review of how data is feed and removed from these fields. You may be shocked by some of this information!

The information presented in this article is current as of the Magic 5.6 release. Most of the information in this article applies to C/S as well. However, some information such as those referring to PCI Sections will not apply to C/S.

What Routines Send Query Responses to CCDQR?
Only routines within MEDITECH that are considered “clinical” in nature send values to CCDQR. For example, queries attached to Order Entry (OE) Categories or Procedures are not sent to CCDQR because such queries are considered only pertinent to the individual order. However, OE Administrative Data screens are considered clinical documentation and send query data to CCDQR.

Routines That Send Query Data To CCDQR (may not be complete)
- EDM Assessments and Treatments
- LAB E/E Lis Patient Data
- NUR / PCS Interventions and Assessments
- OE Administrative Data
- ORM
- PHA E/E Patient Data
- PHA eMar/BMV Administration Queries

Do “Blank” Responses Overwrite Existing Values?
Typically the answer is “no”. If a user doesn’t answer a query, the previous documentation of that query will remain intact within CCDQR. For example, query XYZ is documented with the value “CAPITAS” at 8:00. At 10:00 a screen containing query XYZ is documented, but the user left XYZ blank. In this situation XYZ will still maintain the value “CAPITAS”. However, NUR and EDM contain settings to “Default Queries” on interventions and treatments. If a defaulted query value is removed and filed blank, this will result in the current CCDQR value being removed.

What Happens if Documentation is Undone?
When documentation is undone, a series of programs attempt to “cleanup” CCDQR. Each query that had a response is evaluated individually to determine the appropriate action.
1. If a query has a PCI Section defined in the MIS Query Dictionary, the last known value of the query from PCI is sent to CCDQR.
2. If a query does not feed a PCI Section, CCDQR will no longer contain a value for this query.
What about Demo Recall?
The MIS Query Dictionary allows for queries to be defined as “Demo Recall”. When these queries are documented, the responses are filed in segments within MRI.DRC. MRI data is stored by the patient’s mri.urn and does not purge. This means that demo recall queries are available from one patient visit to the next.

When a patient is registered in ADM, these query responses from MRI.DRC are copied to ADM.PAT CCDQR. This presents some potential issues! If you use ADM.PATccdqr.response to get the value of a query, it may actually pull a value documented during a previous visit. The chances of this occurring are greater early in a patient’s visit and for queries that are not documented frequently.

If a query is set to Demo Recall, I suggest you check the date of documentation to insure that the documentation occurred during the current visit by comparing the documentation date to the registration date. Here is an example:

```
x.x.ccdqr
DAT=FREE
LEN=25
VAL=IF{IF{(@ADM.PAT.admit.date;@ADM.PAT.service.date)^REG,
      VAL=@ADM.PAT.ccdqr.date["QUERY_MNEMONIC"^QRY]<REG "",
      VAL=@ADM.PAT.ccdqr.response[QRY]}
```

Conclusions and Suggestions
It is easy to understand why CCDQR is used so often. It is the only “easy” way to get query values. However, care should be taken to insure that NPR Reports and CDS Attributes are written in order to pull values as expected. Requirements should be gathered before any report or attribute is created to understand what the data is to represent. Here are some questions that should be answered during requirements gathering:

1. Are we only concerned with the current visit or previous ones as well?
2. Do we want responses from all applications or only specific ones?
3. Do we want responses from specific interventions/treatments or all?
4. How should “blank” responses be handled?

The author considers CCDQR to be unpredictable and typically avoids using them for these reasons:

1. Value may come from prior visit if Demo Recall.
2. No easy way to determine where the response came from (e.g. EDM, NUR, ORM).
3. Undone documentation will result in no value unless the query has a PCI Section.
4. “Blank” responses work differently if default features are used.
5. No ability to create solutions to meet specific data requirements.

If you decide to use ADM.PAT CCDQR, following these simple guidelines will help to insure the data shown is the “last documentation”:

1. Avoid setting queries to Demo Recall unless you have a true need. Recalling “historical” data is usually appropriate (e.g. “Hx Of Smoking”), but defaulting assessment data is not.
2. For Demo Recall queries, compare the date of documentation to the registration date as shown above.
3. Assign queries to a PCI Section.

Unfortunately, developing reports and attributes to avoid the pitfalls associated with CCDQR can be very difficult. The author intends to publish code examples to meet common requirements in the near future. Check back at www.capitassolutions.com often for additional FREE resources.
# Appendix A

## Segment for Single Response Query

<table>
<thead>
<tr>
<th>Magic</th>
<th>( \text{clinical.cus.defined.queries} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Fields</td>
<td>ccdqr.date, ccdqr.response, ccdqr.time</td>
</tr>
<tr>
<td>C/S</td>
<td>ccdqr [ccdqr.patient, ccdqr.query]</td>
</tr>
</tbody>
</table>

## Segment for Multiple Response Query

<table>
<thead>
<tr>
<th>Magic</th>
<th>( \text{clinical.cus.def.mult.qry.resp} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Fields</td>
<td>ccdqr.mult.response, ccdqr.mult.date, ccdqr.mult.time</td>
</tr>
<tr>
<td>C/S</td>
<td>ccdqr.multiple [ccdqr.patient, ccdqr.query, ccdqr.mul.q]</td>
</tr>
</tbody>
</table>

```