

## Section 3.4 Design

# Assessment of Data Needs for Clinical Quality Measures (CQMs)

This tool introduces clinical quality measures (CQMs) for evaluating quality outcomes, and provides guidance in ensuring that a community-based care coordination (CCC) program has the necessary information to monitor its quality outcomes and assess progress toward its goals.

**Time needed to review tool:** 2 hours

**Suggested other tools:** Introduction to Clinical Guidelines; Setting and Monitoring Goals for CCC; Workflow and Process Analysis/ Redesign/ Optimization for CCC tool suite; Technology Tools and Optimization for CCC; Quality Scores Monitoring and Reporting; CCC Program Evaluation

## Table of Contents

How to Use .....	1
CQMs for Evaluating Quality Outcomes of the CCC Program.....	2
National Library of Medicine (NLM) Data Element Catalog .....	2
Addressing Data Element Issues and Deficiencies .....	4
Alternative Approach to Assessment of Data Needs for CQMs.....	4
Appendix A.....	5

## How to Use

1. **Review** the use of CQMs in evaluating the quality outcomes needed for the community-based care coordination (CCC) program.
2. **Use** the National Library of Medicine (NLM) Data Element Catalog to assess that the CCC program is capturing all data elements needed to comply with CMS CQMs as applicable. Extend the NLM Data Element Catalog by adding any data elements of CQMs from other initiatives (e.g., measures required by other payers or CCC programmatic needs) to assess their availability.
3. **Use** the Data Element Catalog to identify where data are captured, to determine in what measures they are used, and to identify deficiencies – based on the design of the CCC program and its information technology infrastructure,
4. **Develop** a plan to address data element issues and deficiencies so that the CCC program quality goals can be accommodated by appropriate data capture.

## CQMs for Evaluating Quality Outcomes of the CCC Program

The community-based care coordination (CCC) program will have a set of goals, including clinical quality measures (CQMs), it needs to achieve in order to sustain the program. The clinical quality goals may be related to a specific program in which the CCC program is engaged, such as the CMS Medicare Shared Savings Program (MSSP), CMS meaningful use of EHR incentive program, and/or any other initiatives. There will very likely be some overlap between these programs with respect to the CQMs that must be reported and upon which the program bases reimbursement, incentive distributions or payments, because many of these initiatives use National Quality Forum (NQF)-endorsed measures (see *Introduction to Clinical Guidelines*). If there are CQM reporting requirements that are not NQF-endorsed, the program will provide the measure specifications that will state the definitions, measure logic, data elements, and value sets necessary to comply with the CQM reporting requirement.

## National Library of Medicine (NLM) Data Element Catalog

The NLM Data Element Catalog is provided in an Excel spreadsheet format. Its latest version contains approximately 800 data elements, their category, whether they are supplemental data or not, the vocabulary from which the data element is derived, and the identification of the CMS CQM or CQMs which utilize the data element. The following is a snapshot of this spreadsheet, which is available at: <http://www.nlm.nih.gov/healthit/dec/>.

	A	B	C	D	E
1	Data Element	Category	Supplemental	Element Vocabulary	Measures, CMS eMeasure ID
2	Ethnicity	Individual Characteristic	Yes	CDCREC	CMS100v3, CMS102v3, CMS104v3, CMS105v3, CMS107v3, CMS108v
3	ONC Administrative Sex	Individual Characteristic	Yes	AdministrativeSex	CMS100v3, CMS102v3, CMS104v3, CMS105v3, CMS107v3, CMS108v
4	Payer	Individual Characteristic	Yes	SOP	CMS100v3, CMS102v3, CMS104v3, CMS105v3, CMS107v3, CMS108v
5	Race	Individual Characteristic	Yes	CDCREC	CMS100v3, CMS102v3, CMS104v3, CMS105v3, CMS107v3, CMS108v
6	Above Normal Follow-up	Intervention	No	ICD10CM,ICD9CM,CPT,HCPCS,SN	CMS69v3
7	Above Normal Medications	Medication	No	RXNORM	CMS69v3
8	ACE Inhibitor or ARB	Medication	No	RXNORM	CMS134v3, CMS135v3
9	ACE Inhibitor or ARB Ingredient	Medication	No	RXNORM	CMS135v3
10	Activation of Emergency Medical System Education	Communication	No	SNOMEDCT	CMS107v3
11	Acute and Subacute Iridocyclitis	Condition/Diagnosis/Problem	No	ICD10CM,ICD9CM,SNOMEDCT	CMS132v3, CMS133v3
12	Acute Myocardial Infarction	Condition/Diagnosis/Problem	No	ICD10CM,ICD9CM,SNOMEDCT	CMS164v3, CMS182v4
13	Acute Pharyngitis	Condition/Diagnosis/Problem	No	ICD10CM,ICD9CM,SNOMEDCT	CMS146v3
14	Acute Respiratory Failure	Condition/Diagnosis/Problem	No	ICD10CM,ICD9CM,SNOMEDCT	CMS126v3
15	Acute Tonsillitis	Condition/Diagnosis/Problem	No	ICD10CM,ICD9CM,SNOMEDCT	CMS146v3
16	Additional evaluation for depression - adolescent	Intervention	No	SNOMEDCT	CMS2v4
17	Additional evaluation for depression - adult	Intervention	No	SNOMEDCT	CMS2v4
18	ADHD Medications	Medication	No	RXNORM	CMS136v4

CCC programs that wish to assess the availability of the data in their health records may download this spreadsheet. Consider adding the following columns (illustrated in *Appendix A*) to assess availability of the data:

**Column F – Where data are captured** as needed for any of the measures specified in the NLM Data Element Catalog.

- This column may reflect a paper form in a paper-based health record (e.g., admission order, history and physical exam, medication list) or the equivalent in an electronic health record (EHR).
- If there is more than one location in a given record, list all locations. In this case it may be prudent to evaluate whether all locations are always completed and completed

with the same results. (For example, ADHD Medications as a data element might be listed in a medication order, on a medication list, and in a visit summary. Is the information the same in all locations?) If there are data recording issues, document these with a brief description in column H. Ideally, the CCC program should identify the single location it will recognize as the primary source for the data (perhaps highlight this in red in the cell).

- If there is more than one location within the community, list all locations. List both by the name of each site and the location(s) within the site's health record. In this case, the CCC program may wish to conduct the same assessment of the data accuracy in all locations (annotating issues in column H) and identify the single location it will recognize as the primary source.
- If a data element is required for a measure required to be reported but is NOT in any health record, leave this cell blank and document the data element as a deficiency in column I.

**Column G – Other measures requiring any of the data elements** in the NLM Data Element Catalog. If the CCC program is involved in other programs that use other measures for reporting, but use one or more of the same data elements in the NLM Data Element Catalog, add the name of the measure in column G for each applicable data element.

- Other measures requiring other data elements not in the NLM Data Element Catalog. If the CCC program is involved in other programs that use other measures for reporting and they contain data elements NOT in the NLM Data Element Catalog, obtain the measure specifications from the program or use the AHRQ National Quality Measures Clearinghouse (<http://www.qualitymeasures.ahrq.gov/>) to access the measure description for non-proprietary measures. Determine the data element or elements required for reporting. Add the data element to column A, complete columns B, C, D, and F, and add the name of the measure in column G also.
- If a data element is required for a measure and is not listed in the NLM Data Element Catalog and it is not found in any health record, add the data element to column A, complete columns B, C, and D, leave column F blank, document the name of the measure in column G, and document the deficiency in column I.

**Column H – Data redundancy issues.** Provide a brief description of the data redundancy issue in this column. (It may be prudent to sample several records to determine if the issue is frequent or if it was a unique circumstance.)

**Column I – Data deficiencies.** Mark this column only when there is a data element deficiency. A question mark could be placed in the column or a potential source with a question mark could be entered for follow up.

## Addressing Data Element Issues and Deficiencies

All annotations in columns H and I should be evaluated to determine how issues can be resolved and where the best source of the data may reside.

- **If data are redundant and consistent** (for example, the “ADHD Medication” is listed by name only in the medication list and its full description is listed in the orders) determine the impact of this discrepancy. To do so, consider both:
  - *Clinical quality measure specifications*: If the specification only requires the name of the medication, it may be acceptable to identify this data source as the primary source for the measure reporting.
  - *Impact on clinical care*: If the medication list is only used as a quick means to understand the full scope of medications the patient is taking and the order with additional information (e.g., dose, route, etc.) is readily accessible for care planning and care coordination, the discrepancy may be considered acceptable and the medication list still identified as the primary source for the measure reporting.
- **If a data element for a measure is not available at all**, determine why and who might be the best resource to capture the data. For example, if a data element may be captured only by a certain specialist or specialty type, enter the name of the specialist or specialty type if the provider’s name is unknown.
  - Use the *Provider Resource Directory* and/or *Community Resource Directory* to help identify the appropriate source within the community.
  - Contact that person (or entity) and determine how best to capture the data and use it as a source for the required CQM.

## Alternative Approach to Assessment of Data Needs for CQMs

The process described above can be time-consuming and if Meaningful Use Certified EHR Technology (CEHRT) is in place, the CCC program may decide to assume that all data will be available for CQM reporting. If the CCC program is tempted to make this assumption, it may be prudent to run a test report of CQM reporting and analyze the results. If the results are not as expected – perhaps a few measures seem wrong – the process described above can be used for just the identified measures.

However, it is important to note that CEHRT only applies to CQMs for the CMS meaningful use of EHR incentive program, not for any other reimbursement, incentive, or other payment program. In this case, reports for other programs can be run, but it is very likely that there are more measures that may be identified as questionable.

Finally, running tests of CQM reports focuses only on reporting, not on the use of data for care planning and/or care coordination. While there may well be other data (in addition to data used for any CQM reporting) that may be needed for care planning and/or care coordination, the likelihood of it being critical data not identifiable in other ways is unlikely. Hence, the process described above can be useful to evaluate data availability for all needs.

## Appendix A

The following is a snapshot of the NLM Data Element Catalog with the additional columns added:

	A	B	C	D	E	F	G	H	I
1	Data Element	Category	Supplemental	Element Vocabulary	Measures, CMS eMeasure ID	Location of Data	Other Measure(s) Using Data	Data Redundancy Issue(s)	Data Deficiencies
2	Ethnicity	Individual Characteristic	Yes	CCCREC	CMS102v3, CMS104v3, CMS100v3, CMS100v3, CMS100v3, CMS100v3				
3	ONC Administrative Sex	Individual Characteristic	Yes	AdministrativeSex	CMS102v3, CMS100v3, CMS100v3, CMS100v3				
4	Payer	Individual Characteristic	Yes	SOP	CMS102v3, CMS100v3, CMS100v3, CMS100v3				
5	Race	Individual Characteristic	Yes	CCCREC	CMS102v3, CMS100v3, CMS100v3, CMS100v3				
6	Above Normal Follow-up	Intervention	No	ICD10CM,ICD9CM,CPT,HCP	CMS63v3				
7	Above Normal Medications	Medication	No	RXNORM	CMS63v3				
8	ACE Inhibitor or ARB	Medication	No	RXNORM	CMS134v3, CMS135v3				
9	ACE Inhibitor or ARB Ingredient	Medication	No	RXNORM	CMS135v3				
10	Activation of Emergency Medical System	Communication	No	SNOMEDCT	CMS107v3				
11	Acute and Subacute Iridocyclitis	Condition/Diagnosis/Problem	No	ICD10CM,ICD9CM,SNOMEDCT	CMS132v3, CMS133v3				
12	Acute Myocardial Infarction	Condition/Diagnosis/Problem	No	ICD10CM,ICD9CM,SNOMEDCT	CMS164v3, CMS182v4				
13	Acute Pharyngitis	Condition/Diagnosis/Problem	No	ICD10CM,ICD9CM,SNOMEDCT	CMS146v3				
14	Acute Respiratory Failure	Condition/Diagnosis/Problem	No	ICD10CM,ICD9CM,SNOMEDCT	CMS126v3				
15	Acute Tonsillitis	Condition/Diagnosis/Problem	No	ICD10CM,ICD9CM,SNOMEDCT	CMS146v3				
16	Additional evaluation for depression - adu	Intervention	No	SNOMEDCT	CMS2v4				
17	Additional evaluation for depression - adu	Intervention	No	SNOMEDCT	CMS2v4				
18	ADHD Medications	Medication	No	RXNORM	CMS136v4				

Copyright © 2014 Stratis Health and KHA REACH.

Updated 12/30/2014

Produced under contract with The Office of the National Coordinator for Health Information Technology (ONC)

**For support using the toolkit**

Stratis Health • Health Information Technology Services

952-854-3306 • [info@stratishealth.org](mailto:info@stratishealth.org)

[www.stratishealth.org](http://www.stratishealth.org)

