Section 5.3

CCC Program Evaluation

This tool provides the community-based care coordination (CCC) program leadership with tools to evaluate both processes and outcomes of the program, to assess program status against program goals, and to identify opportunities for improvement.

Time needed: 2 hours

Suggested other tools: CCC Maturity Assessment; CCC Program Satisfaction Surveys; Setting and Monitoring Goals for CCC; Quality Scores Monitoring and Reporting; Workflow and Process Analysis/ Redesign/ Optimization for CCC tool suite

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How to Use

1. **Determine** who will conduct each evaluation and how frequently the evaluation will be conducted during development of the community-based care coordination (CCC) program.

2. **Collect** baseline data when the CCC program is implemented, then track progress over time, using the same program evaluation tools each time to ensure consistency.

3. **Review** and select the tools to use from the recommended list described herein to conduct the CCC program evaluation.

4. **Use** a root cause analysis to identify opportunities for improvement where results are less than desired.
Program Evaluation Team and Timing

The best time to decide how and when to conduct an evaluation of a CCC program is when the program is first being developed. This helps ensure goals set for the program are SMART. It also provides an opportunity to obtain baseline data as even “new” CCC programs have some elements of CCC in place prior to formalization of a comprehensive program.

In addition to deciding how to conduct a program evaluation, plan times for when an evaluation should take place. In general, a new program may want to conduct at least a partial or “quick” evaluation on a quarterly basis. As the program matures, an annual or bi-annual evaluation may be sufficient.

The outcome of the evaluations may also suggest the need for a change in evaluation frequency. If the program is conducting a semi-annual evaluation and things are going well, moving to an annual evaluation may be appropriate. On the other hand, if after a few years there have been changes and outcomes that are not meeting program goals, it may be prudent to return to a more frequent evaluation schedule.

Program Evaluation Process

One of the best ways to quickly get a broad overview of how a CCC program is working is to use a program maturity assessment. The CCC Maturity Assessment provided in this Toolkit describes four levels of maturity with respect to eight dimensions. While the maturity assessment is somewhat subjective in that it only requires those taking the assessment to check boxes that describe the current program’s status, when conducted in a serious manner by a leadership team the results can be insightful and generally quite accurate.

There are several ways to make the program maturity assessment as accurate as possible:

1) **Ensure understanding of the assessment elements and scoring.**
   When conducting the maturity assessment at the time the CCC program is being contemplated and/or planned, and again when the program is implemented, it is important to ensure consistent understanding of the assessment instrument by all members of the leadership team.

   Spend time reviewing the meaning of each element within the assessment tool, and relating assessment results to the stated CCC program goals as the program is being implemented. There may be elements within the tool that do not currently, or may never, apply to a specific CCC program. It is also likely that some programs will defer implementing certain elements until a future state. Mark these elements accordingly.

   If an element is not clear, re-word it so that it is clearly understood, or prepare a separate document with a definition or further explanation of each element. Once the maturity assessment tool has been customized to the specific program environment, re-assess the program at the time of implementation as a baseline against which ongoing evaluations can be made.

2) **Compare assessments.**
   a) Compare assessment responses among members of the team—for all assessments administered, including the baseline – There may be differences in responses that reflect different levels of knowledge about the program. In this case, it may be
appropriate to ask team members to only mark the elements about which they have firsthand knowledge, and identify others as not applicable. The result is an assessment that excludes guessing or a halo effect.

It is also possible that there will be outliers, either on certain elements or with respect to the program overall. In this case it is necessary to talk through what the outlier responses mean, without bias or blame. Work through any issues to determine if there are inconsistencies in how an element is being interpreted or carried out. If this is the case, consider this as excellent information to have to plan for improvement. If any outlier responses appear to be attributable to a human factor issue, the team leader should recognize this and plan to work with the individual(s).

b) Compare assessment results against the baseline and with all previous assessments – Trending the results can help pinpoint areas where progress is not being made or not being made as quickly as desired. These are definitely points of opportunities for improvement. However, if the trend line reveals inconsistencies over time that cannot be further explained by actual data or anecdotal information, it may be necessary to review the meaning of each of the elements to ensure that the team is being consistent in its assessment.

3) **Provide data or examples as the rationale for how each element was assessed.**

Collect specific data for elements where there is likely to be subjectivity and where specificity is needed for ongoing operations. The assessment includes both process and outcomes elements.

   a) **Process elements are generally able to be assessed more objectively.**

       However, if this is not the case, it may be necessary to conduct a workflow and process analysis.

   b) **Outcomes elements are often more difficult to assess objectively.**

       There is usually more at stake when outcomes elements are not fully objective. In these cases, it is necessary to implement a specific evaluation instrument to determine the nature of outcomes elements.

**Program Evaluation Tools**

The following table may be helpful in identifying evaluation tools to use in assessing outcomes for a more accurate and objective CCC program evaluation. The table outlines:

- **The Level 4 (Advanced) elements from the CCC Maturity Assessment.**

  This level represents the most advanced stage of a CCC program, and assumes that all elements in the prior three levels have been achieved or the CCC program has documented an exception given the nature of the specific program. Each element is identified as being a process result or an outcomes result. The majority of the elements at this level are outcomes. If an outcome at this level has not been achieved, refer back to the process elements in previous levels to ensure they are in place.
- **Internal evaluation instruments that provide specific metrics and measurements to determine successful achievement of this level.**

  In some cases, there are many opportunities for improvement relative to a single element. The CCC program leadership should identify specific metrics and measurements that are meaningful to the specific program. Examples are provided.

- **Examples of evaluation requirements that may be applied by an external organization, if such oversight exists for the CCC program.**

  These are generally related to a health reform initiative, such as the Medicare Shared Savings Program (MSSP), Patient-Centered Medical Home (PCMH), and others. Although there are only a few examples provided, it is very important for any CCC program that is involved in a health reform initiative with oversight to identify specifically what metrics and measures they will be held accountable for and to monitor results against those metrics and measures. There should be no surprises when an external review is performed.
<table>
<thead>
<tr>
<th>Level 4. (Advanced) Maturity Assessment Elements (PROCESS/OUTCOME)</th>
<th>CCC Program Internal Evaluation Instrument(s)</th>
<th>Example Evaluation Requirements of External Oversight Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>All members of community embrace new models of care (PROCESS)</td>
<td>Identify specific model of care, training undertaken, and nature of evidence that model of care is being performed. <em>Example:</em> shared decision making (SDM), all primary care providers trained, documentation of SDM in health record for applicable patients</td>
<td></td>
</tr>
</tbody>
</table>
| Care coordination fully actuated (PROCESS AND OUTCOME) | *Examples:*  
- Number of patient contacts with care coordinator compared against anticipated contacts  
- Care coordinator earns maximum reimbursement for each Medicare patient in program |  |
| Triple Aim goals being met (OUTCOME) | Results of each SMART goal adopted within the Triple Aim framework  
*Example:* To improve experience of care, open access enables all patients to be seen by a PCP within 48 hours of request |  |
| Consumer experience of care improved (OUTCOME) | CCC program satisfaction survey of patients results improved over baseline  
*Example:* To improve experience of care, open access enables all patients to be seen by a PCP within 48 hours of request | Score from CMS-approved vendor survey of patients |
| Providers share savings (OUTCOME) | Dollar amount of savings that were distributed to each provider based on initial distribution plan | Amount of savings returned to community under the MSSP and distributed to each provider |
| Level of care utilization improved (OUTCOME) | *Example:* Number of patients whose functional status has improved on standard measurements |  |
| 30-day readmissions and ED frequency reduced | *Examples:*  
- Number of 30-day readmissions vs. baseline  
- Dollar savings from 30-day readmission improvement  
- Number of ED visits per patient in a given period of time vs. baseline |  |
| Medication safety outcomes improved (OUTCOME) | *Examples:*  
- Documented medication reconciliation for every patient for every transition of care  
- Apply Beers Criteria for all patients over 65 |  |
| Population health outcomes improvement (OUTCOME) | *Examples:*  
- Age-adjusted mortality rate in community  
- Self-reported level of health in community | *Example:* Cost to care for a given community |
<p>| Patients engaged in self-management (PROCESS) | Number of patients with a patient action plan signed by patient and updated at least one time. |  |
| Active use of community resources (PROCESS) |  |  |</p>
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| Community resources included in shared savings (OUTCOMES) | Number of community resources in directory  
Number of each type of community resource used by patients within given period of time  
Examples:  
- Dollar amount of savings that were distributed to each community resource based on initial distribution plan  
- Value of grants community resource groups able to obtain as a result of participation in CCC |  
| Integrated risk stratification (PROCESS) | Risk stratification is based on data drawn from all providers in community |  
| Big data analytics provide feedback loop for evidence-based clinical decision support (PROCESS) | Evaluation of each Triple Aim goal, planned improvement efforts, and outcomes of improvement efforts are documented  
Example: Use of active clinical trials data to determine efficacy of a new treatment regimen for a specific patient |  
| Triple Aim outcomes compared to baseline &/or benchmarks for continuous improvement (PROCESS) |  
| 90%+ quality measures met in each domain (OUTCOME) | Note: Most quality measures are driven by external oversight organizations |  
| Per capita cost reduced (OUTCOME) | Compare over time the sum of all health expenditures for community population as a ratio of total community population | Compare a parity-adjusted rate of above with other communities |  
| Community core measure quality & cost improvement data publicized at provider level (PROCESS) | Public website provides quality and cost improvement data for each provider |  
| >30% performance-based payment (PBP) (OUTCOME) | Note: This measure implies external payment systems are adopting PBP | Percent of payments to providers for meeting pre-established measures |  

The CCC program should keep this table up to date as activities change. For example, a community may start a CCC program with the anticipation that private insurers will institute a shared savings type of reimbursement program. Once such a program is implemented, each private insurer may have its own set of evaluation requirements that the CCC program needs to track.
Root Cause Analysis for Improvement

Once the CCC program evaluation is completed, evaluate each element that does not meet the expected or desired result. A root cause analysis to determine the underlying reasons should be undertaken. Some outcomes will be determined by lack of success with other outcomes.

For example, if care coordination is not fully actuated in the community, a number of the other goals will not be able to be met. However, a first step is to understand why care coordination is not fully actuated. Some causes may be obvious: a care coordinator may not have been in place for the duration of the period evaluated. If a care coordinator has been in place, but the number of patient contacts compared to anticipated contacts is lower than expected, the root cause could be any number of factors including: lack of training, lack of appropriate expectations, lack of resources (e.g., administrative support, information technology) to support the care coordinator or CCC program staff, lack of cooperation from primary care providers, and/or lack of necessary community resources, etc. Identifying all possible scenarios and then investigating each scenario should help determine the root cause or causes.

In the case of care coordination not fully actuated, the number of patient contacts is actually a process measure, where earning the maximum reimbursement for each Medicare patient in the program is an outcomes measure. Some of the process measures may be the root cause, but there may also be other causes such as the care coordinator not getting access to patient discharge information on a timely basis, not having the resources to contact the patient within the timeline parameters set by Medicare for the reimbursement, or even not complying correctly with the claims processing requirements.

Resources for Root Cause Analysis

There are a number of tools that can be used to conduct root cause analysis:


- Patricia Williams in Baylor University Medical Center Proceedings summarizes a number of root cause analysis tools that may be used in such root cause analyses, available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1292997/pdf/bumc0014-0154.pdf

- The fishbone technique for root cause analysis is the classic tool. An example applied to healthcare is available at: http://ygraph.com/chart/2722\(^1\) (See example below)

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As illustrated in both the example (above) and the diagram (below), the idea behind the fishbone technique is to seek an explanation for each “symptom” until the underlying “diagnosis” can be made. Once the underlying cause is determined, that cause requires attention so that all of its “symptoms” can be mitigated.