Training Manual

Medical Home Care Coordination Measurement Tool

Richard C. Antonelli, MD, MS, FAAP
Donna M. Antonelli, BS

This work was supported by US Maternal and Child Health Bureau grant HRSA-02-MCHB-25A-AB.
OVERVIEW

The purpose of this study is to track the amount of time spent on care coordination activities by different categories of staff on patient levels from simple to complex. This data is collected on a single sheet, the Medical Home Care Coordination Measurement Tool (CCMT). Specific directions for scoring the tool are in the next section.

DEFINITIONS

In this study Care coordination, a critical component of a medical home for all children - especially children with special health care needs, is defined as a process that links children and their families to supports, services and resources across multiple service delivery settings in an effort to meet their unique needs. Care coordination activities in a community-based pediatric practice are done by many different staff members, including Physicians, Nurse Practitioners, Physician Assistants, Triage Nurses, Medical Assistants, RNs, LPNs, Social Workers, Schedulers, Clerks, and parents.

Some examples of care coordination activities include:

1. Providing assessment and ongoing monitoring of patient/family needs
2. Initiating or following-up on referrals for;
   - Medical specialty service
   - Counseling (behavioral/mental health)
   - Special therapies (PT, OT, etc.)
   - Early intervention
   - Special education
   - Home care
   - Special equipment
   - Transportation
   - Financial support
   - Protective services
   - Housing, clothing, food
   - Respite care
   - Recreation (camp)
   - Advocacy
3. Coordinating effective use of resources
4. Facilitating communications among patient, PCP, family, and others (by phone, e-mail, or in writing)
5. Developing, monitoring, and updating care plans
6. Offering supportive services including listening, counseling (developmental), and education
7. Advocating for the needs of family/patient beyond usual
8. Attending case conferences/meetings on or off-site
SCORING THE CCMT

National Study of Care Coordination Costs in Medical Homes
Scoring the CCMT
(Medical Home Care Coordination Measurement Tool)

Site Code: ______________________

<table>
<thead>
<tr>
<th>Participant Code</th>
<th>This is the unique code given to you prior to the onset of the study. This will identify you in case project staff needs to contact you regarding the content of the forms you have handed in. This code will not change for the remainder of the study.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Record the date of the care coordination encounter. Be certain to document activities each day. If you don’t have an outcome by the end of the day, but you’ve spent 40 minutes trying to coordinate home care for a patient (for example), document the 40 minute care coordination activity for that day and code the Outcome as “2p” or “Outcome Pending”. If you pick up the task the next day, and complete it in 10 minutes, you would enter a 10 minute care coordination encounter for the new day, and code the outcome “2g” or “Referral to a Community Agency”.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient Study Code And Age</th>
<th>You will code the patient’s name by using the FIRST THREE LETTERS of the LAST name and the FIRST TWO LETTERS of the FIRST name, and the patient’s age in years.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• John Smith who is 15 would be coded: SMIJO15</td>
</tr>
<tr>
<td></td>
<td>• Jane Doe who is a child less than one year would be: DOEJA00</td>
</tr>
<tr>
<td></td>
<td>• Even if your CC encounter is with a family member, always code the patient’s name</td>
</tr>
</tbody>
</table>
## Time Spent

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

**Time Spent**

1 – less than 5 minutes
2 – 5 to 9 minutes
3 – 10 to 19 minutes  
4 – 20 to 29 minutes  
5 – 30 to 39 minutes  
6 – 40 to 49 minutes  
7 – 50 minutes and greater (*Please NOTE actual minutes if greater than 50)*

### Patient Level

<table>
<thead>
<tr>
<th>Patient Level</th>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Non-CSHCN, Without Complicating Family or Social Issues</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Non-CSHCN, With Complicating Family or Social Issues</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>CSHCN, Without Complicating Family or Social Issues</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>CSHCN, With Complicating Family or Social Issues</td>
<td></td>
</tr>
</tbody>
</table>

If the clinical staff person who codes the complexity has any question as to the correct Patient Level, the patient’s PCP or the Lead Physician is responsible for reviewing the coding prior to submission for data entry.

### Checklist for Determination of CSHCN

1. Does this child HAVE a physical, developmental, behavioral, or emotional condition that has lasted or is expected to last at least 12 months?  
   Yes ___  No ___  
   (If “No” or Don’t Know, continue to #2)

2. Is this child AT RISK FOR HAVING a physical, developmental, behavioral, or emotional condition that is expected to last at least 12 months?  
   Yes ___  No ___  
   (If “No” or Don’t Know, continue to #3)

3. Does this child require health and related services of a type OR amount beyond that required by children generally?  
   Yes ___  No ___  
   Includes:  
   - Medicines prescribed by a doctor (other than vitamins)  
   - Medical Care  
   - Mental Health Services  
   - Educational Services  
   - Specialized Therapies (PT, OT, Speech)  
   - Treatment or Counseling for emotional, developmental or behavioral problems  
   (If “No” or Don’t Know, continue to #4)

4. Is the child limited or prevented in any way in his or her ability to do the things most children of the same age can do, due to a chronic medical, behavioral or other health condition?  
   Yes ___  No ___  

(For the purposes of this study, checking “Yes” to any of the four questions places the child in either Level III or IV, depending on the presence of complicating family or social issues)
Some examples of “Complicating Family or Social Issues”:
- Single Parent Home
- Divorce
- Language Barrier
- Drug / Alcohol Abuse in home
- Homelessness
- Loss of Job
- Undocumented Immigration Status
- Mental Illness in home

<table>
<thead>
<tr>
<th>Focus</th>
<th>Focus of Encounter (choose all that apply)</th>
<th>Document an area(s) of focus per CC encounter.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Mental Health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Developmental / Behavioral</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Educational</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Legal / Judicial</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Growth / Nutrition</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Referral Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Clinical / Medical Management</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Social Services (ie. housing, food, clothing, ins., transportation)</td>
<td></td>
</tr>
</tbody>
</table>

This study breaks down a care coordination encounter into four components.
- The FOCUS OF THE ENCOUNTER, which documents the primary focus area.
- The CARE COORDINATION NEEDS, which documents all the areas of need to satisfy the care coordination encounter. You should document ALL THAT APPLY.
- The ACTIVITY TO FULFILL the NEEDS, which records precisely what you did and for which you document the amount of time it took you to complete the activities. You should document ALL THAT APPLY.
- The last component is the OUTCOME(S). Outcome is divided into two parts – what was PREVENTED (choose ONLY ONE) and what OCCURRED (choose ALL THAT APPLY).

<table>
<thead>
<tr>
<th>Care Coordination Needs</th>
<th>Care Coordination Needs (choose all that apply)</th>
<th>Write in ALL Needs THAT APPLY for that CC encounter.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Make Appointments</td>
<td>Reconciling discrepancies refers to such needs as hunting down missing data, miscommunications between family/specialists/agencies/etc, and compliance issues.</td>
</tr>
<tr>
<td></td>
<td>2. Follow-Up Referrals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Order Prescriptions, Supplies, Services, etc.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Reconcile Discrepancies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Coordination Services (schools, agencies, payers etc.)</td>
<td></td>
</tr>
</tbody>
</table>
NOTE:

- There are only Four boxes on the entire CCMT that can contain multiple entries (if the CC encounter included more than one)
  - Focus
  - Needs
  - Activity to Fulfill Needs
  - Outcome – Occurred

All other boxes can contain ONLY A SINGLE ENTRY. Do not leave any blanks.

Activity to Fulfill Needs
If it is necessary to perform several activities in the process of performing the care coordination encounter, you should list all the activities on this line and enter the combined total number of minutes required to complete these activities.

For example, you are trying to assist a family in refining an educational plan (IEP) for their learning disabled child at school.

As mentioned on the previous page of this training manual,
- The Focus of the Encounter is (3) Educational.
- The Care Coordination Needs are primarily (5) Coordination of Services.

The Activities you perform may include:
- Telephone discussion with Parent/family,
- Telephone discussion with School,
- Setting up a Meeting,

All of these Care Coordination Activities are required to fulfill the Needs of the encounter, and their combined time should be recorded.

There is likely not an Outcome – Prevented, however if the family had needed to book a visit with the Specialist in order to sort out the problems, you would code subspecialist visit as outcome prevented.

<table>
<thead>
<tr>
<th>Outcome(s)</th>
<th>As a result of this care coordination activity, the following was PREVENTED (choose ONLY ONE, if applicable):</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Visit to Pediatric Office/Clinic</td>
</tr>
<tr>
<td>□ Visit to ER</td>
<td>Lab / X-ray</td>
</tr>
</tbody>
</table>

The Outcomes – Occurred might include:
- Reconciled discrepancies between the School, the family and the Specialist
- Reviewed reports and proposed IEP’s
- Met family’s needs, questions and concerns
It is often the case that nothing is “Prevented” as an outcome of the care coordination activity. In this case, cross it out. However, if your efforts in care coordination prevented a child from needing to go to the emergency room, for example, please check this box under Outcome – Prevented. If your care coordination resulted in a child avoiding a duplicate or perhaps unnecessary X-ray or Lab procedure, please check this box.

Every care coordination encounter must have an outcome that “Occurred”. Some encounters may have several outcomes that occurred. If you are uncertain how to code the outcome of the encounter This column must never be left blank.

| As a result of this care coordination activity, the following OCCURRED (choose all that apply): |
|---------------------------------|---------------------------------|
| Advised family/patient on home management | Referral to ER |
| Reviewed labs, specialist reports, IEP's, etc. | Referral for hospitalization |
| Met family's immediate needs, questions, concerns | Referral to lab / X-ray |
| Ordered prescription, equipment, diapers, taxi, etc. | Referral to Specialized Therapies |
| Reconciled discrepancies (including missing data, miscommunications, compliance issues) | Referral to subspecialist |
| Advocacy for family/patient | Referral to community agency |
| Not Applicable / Don't Know | |
| Outcome Pending | Unmet needs (PLEASE SPECIFY BELOW) |

IMPORTANT: If, after all your time and effort spent in CC activities, there remains an unmet need, please list under Outcomes – Occurred as “Unmet Needs”, and briefly document, ie:

- Unable to obtain mental health services
- Insurance denied durable equipment request
INSTRUCTIONS FOR DATA COLLECTORS- After Forms are Completed

Where: Keep folder of CCMT score sheets on the desk of each data collector.

Who: All staff that performs non-billable care coordination activities.

When: Code the CCMT as soon as the care coordination encounter is completed or record enough information about the encounter in order to complete the entry at the end of the day. Add multiple entries per sheet until it is full.

Collection and return of the data sheets:

1. Medical Home Care Coordination Measurement Tool sheets are to be filled out by each member of the data collection team.

2. **EVERY WEEK** the study coordinator will collect the CCMT’s from each data collector, review them for completeness, add form numbers, and copy the original data sheets.

3. There must be opportunities to trouble shoot with data collectors on an as needed basis. The study coordinator will be available by phone or in the clinic to help staff with any questions that they have. Regular e-mail communication is encouraged.
FAQ’S (Frequently Asked Questions)

Time: Q: The triage nurses are concerned about being able to keep up with coding the yellow CCMT form while busy on the phone.
A: As everyone grows more comfortable with the choices on the form, their speed of form completion will increase. We’ve seen it happen in two practices already. It can also be very helpful to partially complete lines on the CCMT form, with enough information as a reminder, so that you can go back when you have a few minutes and fill it out completely. REMEMBER for triage nurses in particular, you only need to fill out the CCMT for encounters that are above routine, specifically greater than five minutes.

Q: Like Triage Nurses, clerical staff are completing large numbers of “routine” tasks (ie script refills and physical forms) that often times require less than five minutes to complete. Do all these routine activities need to be recorded?
A: After looking at the initial data, we have determined that clerical staff only need to fill out the CCMT form for encounters that are above the routine, typically taking greater than five minutes to complete.

Q: How do I code the amount of actual time if the encounter is considerably longer than 50 minutes? The longest Time Spent category is “7” or “50 minutes and greater.”
A: If an encounter falls in the category “7” please record the approximate number of minutes in the time spent box under the “7” column. This is the only category where we need to know the actual number of minutes, as much variation is possible.

Coding: Q: Is it “okay” to be somewhat flexible in coding “complicating family or social issues”? For example, there are families where divorce may be considered a complicating issue and for other families it is not.
A: Absolutely! The coding levels are individual patient and family driven.
Q: The study is supposed to code “non-reimbursable” activities. What if I am billing for an office visit at a high level of coding (because I am dealing with a child who has special needs), and I know that I will not be fully reimbursed for my time... can I include that visit in the study?

A: No, you cannot include any activities for which payers currently reimburse the practice, even if the reimbursement is not in full, therefore any activity that is office visit-related should NOT be entered on the CCMT.

- Coding:

  Q: “If I am doing something relatively easy, such as talking to the parent, who wants a new script for her child, confirming it with the PCP and then calling the pharmacy... it takes about 15 minutes total time, so I should record the activities. Do I code the patient Level as a Level I or Level II because the activity was not very involved?”

  A: No. You would code the Patient Level according to whether or not the patient is a Child with Special Health Care Needs (CSHCN) or not. If they have special needs, they are coded a Level III or Level IV, even for “simple” activities. It is the child and not the encounter that is being given a Patient Level. Please review your criteria sheet for determining Patient Level.