

Measure #44. Clinical Microsystem Assessment Tool (CMAT)

CARE COORDINATION MEASURE MAPPING TABLE

	MEASUREMENT PERSPECTIVE		
	<i>Patient/Family</i>	<i>Health Care Professional(s)</i>	<i>System Representative(s)</i>
CARE COORDINATION ACTIVITIES			
Establish accountability or negotiate responsibility			
Communicate			
<i>Interpersonal communication</i>			
<i>Information transfer</i>			■
Facilitate transitions			
<i>Across settings</i>			
<i>As coordination needs change</i>			
Assess needs and goals			□
Create a proactive plan of care			
Monitor, follow up, and respond to change			□
Support self-management goals			
Link to community resources			□
Align resources with patient and population needs			
BROAD APPROACHES POTENTIALLY RELATED TO CARE COORDINATION			
Teamwork focused on coordination			□
Health care home			
Care management			
Medication management			
Health IT-enabled coordination			□

Legend:

- = ≥ 3 corresponding measure items
- = 1-2 corresponding measure items

Clinical Microsystem Assessment Tool (CMAT)

Purpose: To allow an organization to compare its characteristics to those considered key to successful integration.

Format/Data Source: 10-item questionnaire covering the 10 success characteristics related to high performance: (1) leadership, (2) organizational support, (3) staff focus, (4) education and training, (5) interdependence, (6) patient focus, (7) community and market focus, (8) performance results, (9) process improvement, and (10) information and information technology.

Date: Measure developed in 2001.¹

Perspective: System Representative(s)

Measure Item Mapping:

- **Communicate:**
 - Information transfer:
 - *Between health care professional(s) and patient/family:* 10A
 - *Within teams of health care professionals:* 2, 10B
- **Assess needs and goals:** 6
- **Monitor, follow up, and respond to change:** 9
- **Link to community resources:** 7
- **Teamwork focused on coordination:** 5
- **Health IT-enabled coordination:** 10C

Development and Testing: Developed through a systematic analysis of 20 high-performing clinical microsystems in North America. An adaptation of the CMAT, the Clinical Microsystems Assessment Diagnostic (CMAD) has been field tested and utilized in the Neonatal Intensive Care Unit (NICU) setting. (N. Huber, personal communication, September 11, 2010).

Link to Outcomes or Health System Characteristics: None described in the sources identified.

Logic Model/Conceptual Framework: The following definition of microsystems in health care was utilized: “A clinical microsystem is a small group of people who work together on a regular basis to provide care to discrete subpopulations of patients. It has clinical and business aims, linked processes, and a shared information environment, and it produces performance outcomes. Microsystems evolve over time and are often embedded in larger organizations. They are complex adaptive systems, and as such they must do the primary work associated with core aims, meet the needs of internal staff, and maintain themselves over time as clinical units.”¹The concept of the clinical microsystem is also being used by the Institute of Medicine’s *Crossing the Quality Chasm Report*, The Institute for Healthcare Improvement’s (IHI) Idealized Design of Clinical Office Practice program, and the IHI’s Pursuing Perfection program.

Country: United States

Past or Validated Applications*:

- **Patient Age:** Not Applicable
- **Patient Condition:** Not Applicable
- **Setting:** Not Setting Specific

*Based on the sources listed below and input from the measure developers.

Notes:

- All instrument items located online.^{1,2}
- The 2001 CMAT was adapted into a diagnostic assessment, the CMAD, in 2006. It includes additional leadership diagnostic survey questions and open ended questions for each of the 10 success characteristics. For more information, see Appendix IV.
- This CMAT contains 12 items; 8 were mapped.

Sources:

1. Institute for Healthcare Improvement (IHI) Web site. Available at: <http://www.ihl.org/IHI/Topics/Improvement/ImprovementMethods/Tools/ClinicalMicrosystemAssessmentTool.htm> Accessed: 13 September 2010.
2. California Department of Healthcare Services Web site. Available at: <http://www.dhcs.ca.gov/provgovpart/initiatives/nqi/Documents/MSAssessmentFinal.pdf> Accessed: 13 September 2010.
3. Nelson EC, Batalden PB, Huber TP, et al. Microsystems in health care: Part 1. Learning from high-performing front-line clinical units. *Jt Comm J Qual Improv* 2002;28(9):472-93.
4. Armitage GD, Suter ES, Oelke ND, et al. Health systems integration: State of the evidence. *Int J Integr Care* 2009;19:1-11.