

## Measure #9b. Care Transitions Measure (CTM-15)

**CARE COORDINATION MEASURE MAPPING TABLE**

	MEASUREMENT PERSPECTIVE		
	<i>Patient/Family</i>	<i>Health Care Professional(s)</i>	<i>System Representative(s)</i>
<b>CARE COORDINATION ACTIVITIES</b>			
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			
<b>BROAD APPROACHES POTENTIALLY RELATED TO CARE COORDINATION</b>			
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

## Care Transitions Measure (CTM-15)

**Purpose:** To evaluate the essential processes of care involved in successful care transitions from a patient-centered perspective.

**Format/Data Source:** 15-item survey administered at the time of, or immediately following, hospital discharge. The items span 4 domains: (1) information transfer, (2) patient and caregiver preparation, (3) self-management support, and (4) empowerment to assert preferences. All questions are answered on a 5-point Likert scale.

**Date:** Measure published in 2002.<sup>1</sup>

**Perspective:** Patient/Family

### Measure Item Mapping:

- **Establish accountability or negotiate responsibility:** 9
- **Communicate:**
  - *Between health care professional(s) and patient/family:* 1
  - Information transfer:
    - *Between health care professional(s) and patient/family:* 4
- **Facilitate transitions:**
  - Across settings: 1-15
- **Assess needs and goals:** 1-3, 7
- **Create a proactive plan of care:** 7, 12
- **Monitor, follow up, and respond to change:** 12
- **Support self-management goals:** 1, 4-6, 8-11
- **Medication management:** 13-15

**Development and Testing:** Key domains and measure items were developed using input from patient focus groups. Psychometric evaluation established content validity, construct validity, absence of floor and ceiling effects, and intra-item variation.<sup>1</sup> M plus confirmatory factor analysis supported the CTM-15 factor structure in a more diverse study population (225 patients of varying racial/ethnic background, aged 18-90, in rural settings). No differential item difficulty by age, gender, education, self-rated health, or ethnic group was identified after differential item function analysis.<sup>2</sup> The CTM is an NQF-endorsed measure and has been applied to a range of high-risk patient populations, including frail older adults, adults with chronic health conditions, cancer patients, and children with special health care needs. Translated Hebrew and Arabic versions of the questionnaire have also been found to be reliable and valid.<sup>3</sup>

**Link to Outcomes or Health System Characteristics:** Patients with lower self-rated health status had significantly lower CTM scores, a result that is consistent with previous studies, suggesting that care coordination is especially important for individuals with complex health conditions. The measure also demonstrated the power to discriminate between: (1) patients discharged from the hospital that did/did not experience a subsequent emergency visit or

rehospitalization for their index condition and (2) health care facilities with differing levels of commitment to care coordination.<sup>4</sup>

**Logic Model/Conceptual Framework:** None described in the sources identified.

**Country:** United States

**Past or Validated Applications\*:**

- **Patient Age:** Adults, Older Adults
- **Patient Condition:** General Population/Not Condition Specific
- **Setting:** Inpatient Facility, Primary Care Facility, Home Health Care

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

**Notes:**

- All instrument items are located online.<sup>4</sup>
- This instrument contains 15 items; all 15 were mapped.
- For those interested, Spanish, Arabic, Hebrew, and Russian translations of the CTM-15 are available online.<sup>4</sup>

**Sources:**

1. Coleman EA, Smith JD, Frank JC, et al. Development and testing of a measure designed to assess the quality of care transitions. *Int J Integr Care* 2002;2(1):1-9.
2. Parry C, Mahoney E, Chalmers SA, et al. Assessing the quality of transitional care: further applications of the care transitions measure. *Medical Care* 2008;46(3):317-22.
3. Shadmi E, Zisberg A, Coleman EA. Translation and validation of the Care Transition Measure into Hebrew and Arabic. *Int J Quality Health Care* 2009;21(2):97-102.
4. The Care Transitions Program: Improving Quality and Safety During Care Hand-Offs Web site. Available at: <http://www.caretransitions.org/articles.asp>. Accessed: 15 September 2010.
5. Coleman EA, Mahoney E, Parry C. Assessing the quality of preparation for post-hospital care from the patient's perspective: The Care Transitions Measure. *Med Care* 2005; 43(3):246-255.
6. Coleman EA, Parry C, Chalmers S, et al. The central role of performance measurement in improving the quality of transitional care. *Home Health Care Services Quarterly*. 2007; 26(4):93-104.