

Measure #18. Physician-Pharmacist Collaboration Instrument (PPCI)

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

Physician-Pharmacist Collaboration Instrument (PPCI)

Purpose: To assess physician-pharmacist collaborative relationships across three domains: trustworthiness; role specification; relationship initiation.

Surveys can be directed at physicians and pharmacists respectively: questions are identical with provider title (physician/pharmacist) interchanged depending on the study population.

Format/Data Source: 14-item survey that consists of 3 domains of collaboration: (1) trustworthiness, (2) role specification, and (3) relationship initiation.

Date: Measure published in 2005.¹

Perspective: Health Care Professional(s)

Measure Item Mapping:

- **Establish accountability or negotiate responsibility:** 1, 5-8
- **Communicate:**
 - Interpersonal communication:
 - *Across health care teams or settings:* 3, 11
 - Information transfer:
 - *Across health care teams or settings:* 13
- **Teamwork focused on coordination:** 9, 12
- **Medication management:** 7, 8

Development and Testing: Testing of an initial 27-item version was conducted using results from 340 surveys. Principal component analysis was used to assess the structure and uncover underlying dimensions of the initial instrument. Items were evaluated for inclusion or exclusion and subsequently refined into a 14-item instrument. Validity and reliability were established for the 14-item version of the PPCI based on confirmatory factor analysis and Cronbach's alpha scores, respectively. The authors caution that the survey may not reflect interactions for physicians working with more than 1 pharmacist. The 14-item version is preferred over the 26-item version on the basis of brevity and similar psychometric properties.¹ The sensitivity of the instrument was established through a randomized, intervention trial.²

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

Logic Model/Conceptual Framework: The authors developed a theoretical model of physician-pharmacist collaborative working relationships.³

Country: United States

Past or Validated Applications*:

- **Patient Age:** Not Age Specific

- **Patient Condition:** Combined Chronic Conditions, General Chronic Conditions, General Population/Not Condition Specific
- **Setting:** Primary Care Facility, Not Setting Specific

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

Notes:

- The original measure did not have individual items numbered. In order to properly reference specific items within this profile, all instrument items were consecutively numbered. The instrument was provided by the corresponding author upon request (A.J. Zillich, personal communication, September 9, 2010).
- This instrument contains 14 items; 10 were mapped.

Sources:

1. Zillich AJ, Doucette WR, Carter BL, et al. Development and initial validation of an instrument to measure physician-pharmacist collaboration from the physician perspective. *Value Health* 2005;8(1):59-66.
2. Zillich AJ, Milchak JL, Carter BL, et al. Utility of a questionnaire to measure physician/pharmacist collaborative relationships. *J Am Pharm Assoc* 2006;46:453-58.
3. McDonough R, Doucette W. A conceptual framework for collaborative working relationships between pharmacists and physicians. *J Am Pharm Assoc* 2001;41:682-92.
4. Zillich AJ, McDonough RP, Carter BL, et al. Influential characteristics of physician/pharmacist collaborative relationships. *Ann Pharmacother* 2004;38:764-70.