



Agency for Healthcare Research and Quality
Advancing Excellence in Health Care



Prevention & Chronic Care Program

IMPROVING PRIMARY CARE

Care Coordination Measures Atlas: Examples in Practice

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Under contract to the Agency for Healthcare Research and Quality

NAPCRG, Practice-Based Research Network Conference, 2014

Acknowledgements

Kathryn McDonald

Noelle Pineda

Julia Lonhart

Lauren Albin

Sheryl Davies

Vandana Sundaram

Crystal Smith-Spangler

Jennifer Brustrom

Elizabeth Malcolm

Kathan Volrath

Chris Stave

Lauren Rohn

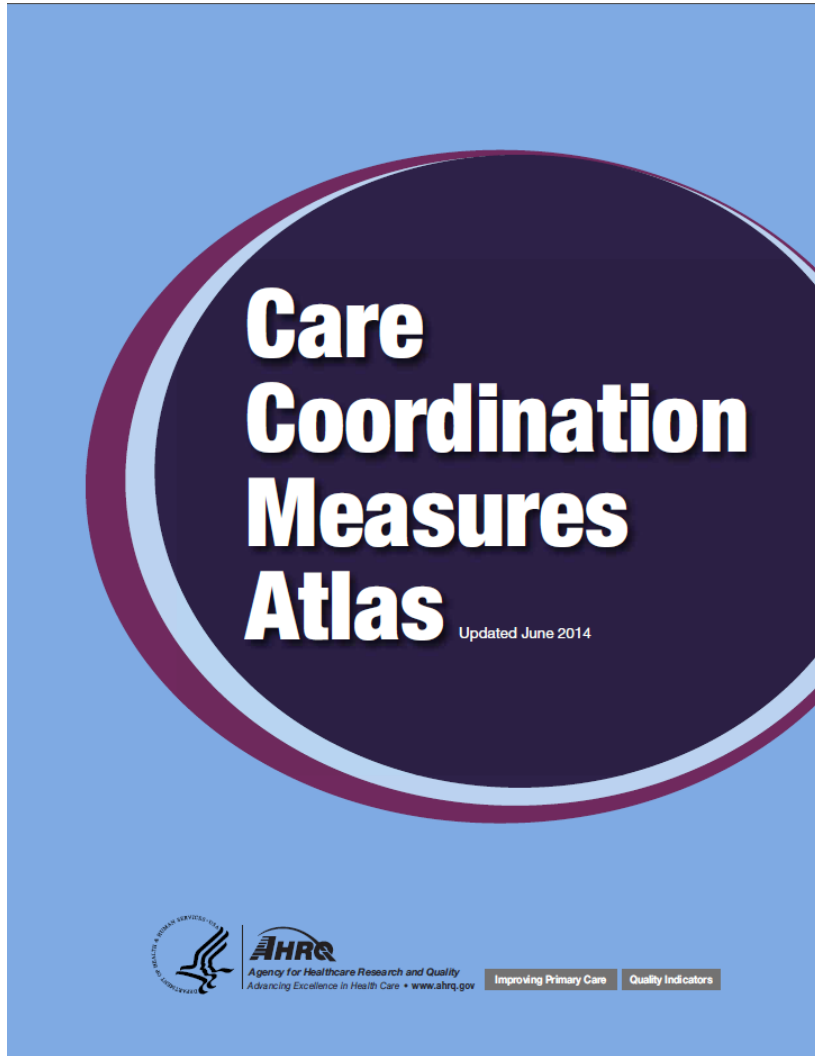
Jodie Ha

Special thanks to David Meyers, Janice Genevro, and Mamatha Pancholi

This project was funded under contract number 290-04-0020 from the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services. The opinions expressed in this presentation are those of the authors and do not reflect the official position of AHRQ or the U.S. Department of Health and Human Services.



Care Coordination Measures Atlas

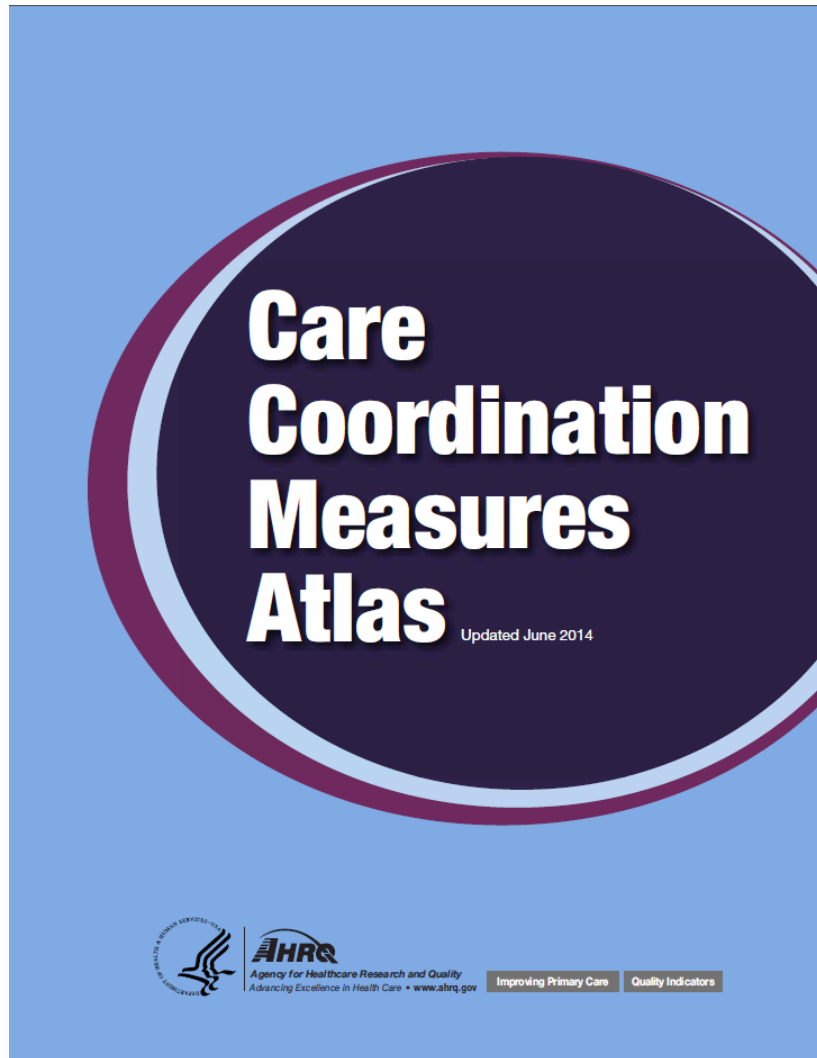


- ▶ Measures of process
- ▶ Applicable to ambulatory care
- ▶ Publicly available
- ▶ Validity and/or reliability testing

Available at:

<http://www.ahrq.gov/professionals/prevention-chronic-care/improve/coordination/atlas2014/index.html>

Care Coordination Measures Atlas



- ▶ Updated June 2014
 - ▶ 80 measures
 - ▶ New chapter on EHR-based measures and other new trends

Care Coordination Domains

- Hypothesized to support coordinated care
- Could be used systematically or *ad hoc*
- Broad approaches extend beyond coordination

Together, these domains are key for characterizing measures

COORDINATION ACTIVITIES
Establish Accountability or Negotiate Responsibility
Communicate
Facilitate Transitions
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
Teamwork Focused on Coordination
Health Care Home
Care Management
Medication Management
Health IT-Enabled Coordination



Measurement Perspectives

- ▶ Experience of coordination differs by perspective
- ▶ CCM *Atlas* calls out 3 key measurement perspectives:
 - ▶ **Patient/family**
 - ▶ *Surveys of patients or caregivers*
 - ▶ **Health care professional**
 - ▶ *Surveys of clinicians (completed as individuals or teams)*
 - ▶ *Reflect their own actions/caregiving practices*
 - ▶ **System Representative**
 - ▶ *Surveys of system administrators/leaders*
 - ▶ *Clinician leaders: when respond on behalf of organization, not own actions or practices*
 - ▶ *Medical record (paper or electronic)*
 - ▶ *Administrative claims data*



Measure Mapping Table

	MEASUREMENT PERSPECTIVE		
	<i>Patient/Family</i>	<i>Healthcare 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			
Healthcare Home			
Care Management			
Medication Management			
Health IT-enabled coordination			

Example Research Question

- ▶ Understand how coordination and teamwork among providers within our primary care clinic impacts medication reconciliation.



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Example Research Question

- ▶ Understand how **coordination and teamwork among providers** within our primary care clinic impacts **medication reconciliation**.

Whose perspective is most of interest?

Which domain(s) most of interest?



Image courtesy of amenic | 81/FreeDigitalPhotos.net



Example Research Question

- ▶ Understand how **coordination and teamwork among providers** within our primary care clinic impacts **medication reconciliation**.

Whose perspective is most of interest?

→ Health Care Professional

Which domain(s) most of interest?

→ Medication Management

→ Teamwork Focused on
Coordination



Example Measure Selection

Health Care Professional Perspective Measures

	MEASUREMENT PERSPECTIVE: <i>Health Care Professional(s)</i>
CARE COORDINATION ACTIVITIES	
Establish accountability or negotiate responsibility	5, 7a, 7b, 11b, 18, 20, 22b, 38c, 38d, 38e, 43, 46, 62, 74, 77
Communicate	5, 7a, 7b, 11b, 12a, 12b, 17d, 22b, 23, 38e, 38f, 43, 46, 62, 74, 77
<i>Interpersonal communication</i>	7a, 7b, 8, 11b, 12a, 12b, 17d, 18, 22b, 28, 43, 74, 75, 77
<i>Information transfer</i>	5, 8, 11b, 12a, 12b, 17d, 18, 20, 22b, 23, 27, 38c, 38d, 38e, 38f, 62, 74, 75, 77
Facilitate transitions [‡]	
<i>Across settings</i>	5, 17d, 22b, 27, 43, 38c, 38d, 38e, 38f, 74, 75, 77
<i>As coordination needs change</i>	11b, 22b
Assess needs and goals	5, 11b, 12a, 12b, 17d, 20, 23, 27, 38d, 38e, 38f, 43, 46, 74
Create a proactive plan of care	5, 7b, 8, 11b, 12a, 22b, 23, 27, 38e, 38f, 62
Monitor, follow up, and respond to change	5, 11b, 12a, 12b, 17d, 20, 22b, 23, 74, 75, 77
Support self-management goals	5, 8, 11b, 17d, 20, 22b, 38d, 38e, 38f, 74
Link to community resources	5, 11b, 17d, 22b, 27, 38e, 74
Align resources with patient and population needs	5, 8, 11b, 17d, 20, 38d, 38e, 74
BROAD APPROACHES POTENTIALLY RELATED TO CARE COORDINATION	
Teamwork focused on coordination	7a, 7b, 11b, 12a, 12b, 18, 23, 27, 28, 43, 46, 62, 74
Health care home	17d, 74
Care management	5, 11b, 22b, 27
Medication management	17d, 18, 20, 38c, 38e, 38f
Health IT-enabled coordination	12a, 17d, 75

Health Care Professional look-up table

- Medication management: n = 6
- Teamwork: n = 13
- Use measure profiles to get more info about each

[†] A key to measure numbers can be found in Table 10. Index of Measures.

[‡] All measure items addressing transitions were mapped to one of the specific transition types (*across settings* or *as coordination needs change*).

Closer Look at Resulting Measures

17d. Primary Care Assessment Tool – Provider Edition

Purpose: To measure primary care quality and the extent to which it meets consumer needs, as identified from the provider perspective.

Format/data source: 153-item survey with coverage of...

Measure Item Mapping:

- **Communicate:**
 - *Between health care professional(s) and patient/fam*
 - Interpersonal communication:
 - *Between health care professional(s) and patient/fam*
I1, I4-I10,
 - Information transfer:
 - *Between health care professional(s) and patient/fam*
 - *Across health care teams or settings:* E10, E11
- **Facilitate transitions:**
 - Across settings: E9
- **Assess needs and goals:** D7, D9, E8, I1, I11-I14,
- **Monitor, follow up, and respond to change:** C8, E7, E11, E1
- **Support self-management goals:** G1-G25, H1-H18
- **Link to community resources:** J13-J17, J21-J23
- **Align resources with patient and population needs:** C1-C9, I
- **Health care home:** 14
- **Medication management:** D13, F8, H7
- **Health IT-enabled coordination:** 13, D1

38c, 38e, 38f. PREPARED Survey

38c. PREPARED – Residential Care Provider Version

Purpose: To gather information on the quality of process and outcomes of discharge planning activities undertaken in the acute hospital setting from the residential care staff perspective.

38e. PREPARED –Medical Practitioner Version

Purpose: To gather information on the quality of process and outcomes of discharge planning activities undertaken in the acute hospital setting from the medical practitioner perspective.

38f. PREPARED – Modified Medical Practitioner Version

Purpose: To measure qualities of hospital discharge from the outpatient physician perspective.



Don't reflect medication management as performed by primary care clinicians

Closer Look at Resulting Measures

18. Physician-Pharmacist Collaboration Instrument

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...

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



- Just 2 items specifically on medication mgt
+ Other items focus on areas of interest to RQ
(teamwork, shared responsibility, collaboration)

20. Family Medicine Medication Use Processes Matrix

Purpose: To measure the perception of primary care physicians (family practice) in regard to pharmacists' contributions within the practice.

Format/Data Source: 22-item Family Medicine Medication...

Measure Item Mapping:

- **Establish accountability or negotiate responsibility:** 13
 - Information transfer:
 - *Within teams of health care professionals:* 20
 - *Participants not specified:* 17
- **Assess needs and goals:** 4, 9
- **Monitor, follow up, and respond to change:** 9, 11, 12
- **Support self-management goals:** 9, 19
- **Align resources with patient and population needs:** 19
- **Medication management:** 3, 5, 7, 10, 15-18, 20



+ Strong focus on medication management
- Only one-sided view (PCP view of pharmacist)

CCM Atlas Appendix

- ▶ Measure instruments and contact info for most measures in *Atlas Appendix*:

<http://www.ahrq.gov/professionals/prevention-chronic-care/improve/coordination/atlas2014/appendix4a.pdf>

Measure #18: Physician-Pharmacist Collaborative (PPCI)

Contact Information:

- For questions regarding this measure and permission to

Copyright Details:

- The copy of the measure instrument that follows is re permission from: Alan J. Zillich. The Physician-Pharmacist Instrument (PPCI) is the intellectual property of Alan J. Agency for Healthcare Research and Quality (AHRQ) nonexclusive, royalty-free, worldwide license to print a copy of the work in the *Care Coordination Measures Atlas*...

For our practices, I need this physician as much as this physician needs me.	1	2	3	4	5	6
This physician is credible.	1	2	3	4	5	6
My interactions with this physician are characterized by open communication by both parties.	1	2	3	4	5	6
I can count on this physician to do what he/she says.	1	2	3	4	5	6
This physician depends on me as much as I depend on them.	1	2	3	4	5	6
This physician and I are mutually dependent on each other in caring for patients.	1	2	3	4	5	6
This physician and I negotiate to come to an agreement on my activities in managing drug therapy.	1	2	3	4	5	6
This physician will work with me to overcome disagreements on my role in managing drug therapy.	1	2	3	4	5	6
I intend to keep working together with this physician.	1	2	3	4	5	6

Selecting Instruments vs. Items

Cherry-picking key items is tempting, but:

Measure Item Mapping:

- **Communicate:**
 - *Between health care professional(s) and patient/fam*
 - Interpersonal communication:
 - *Between health care professional(s) and patient/fam*
I1, I4-I10.
 - Information transfer:
 - *Between health care professional(s) and patient/fam*
 - *Across health care teams or settings:* E10, E11
- **Facilitate transitions:**
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- **Assess needs and goals:** D7, D9, E8, I1, I11-I14,
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- **Support self-management goals:** G1-G25, H1-H18
- **Link to community resources:** J13-J17, J21-J23
- **Align resources with patient and population needs:** C1-C9, I
- **Health care home:** 14
- **Medication management:** D13, F8, H7
- **Health IT-enabled coordination:** I3, D1

- ▶ Reliability and validity testing no longer applies when modifying instrument
- ▶ If select items or adapt, revisit reliability and validity testing
- ▶ Talk to measure developer! They might have good ideas...



Coming Soon...

Care Coordination Measures Database

Interactive Database

Filter by:

- Perspective
- Domain
- Patient groups
- Settings

Link to additional info about each measure:

- Profile
- Instrument
- Related publications

The screenshot shows the AHRQ website header with the logo and tagline "Agency for Healthcare Research and Quality Advancing Excellence in Health Care". A navigation bar includes links for Home, Search, Background, Definitions, and Help. The main content area is titled "Care Coordination Measures Database". On the left, there is a "Choose Categories" section with a list of filters: Perspectives, Coordination Activities, Broad Approaches, Patient Age Group, Patient Condition Group, and Setting. A "Search Now" button is located below this list. The central banner features a blue background with puzzle pieces and the text "Care Coordination Measures Database" in white, with a "Get Started" button. Below the banner, a question mark icon is followed by the text "What is the Care Coordination Measures Database and what does it do?" and a sub-headline "It can be difficult to measure the extent to which care coordination has been".

Q & A

Thank You!

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