No one questions that care coordination is essential to safe, efficient and effective patient-centered care. What professional case managers have known and practiced for decades is now widely viewed as an essential function of case management.

Care coordination is explicitly identified in the Commission’s description of case management: “a collaborative process that assesses, plans, implements, coordinates, monitors, and evaluates the options and services required to meet the client’s health and human service needs.”¹ The emergence of models such as the patient-centered medical home, the patient-centered medical neighborhood and accountable care organizations highlight the value of care coordination as an essential element for success.

Now comes the challenge of quantifying and evaluating care coordination. We’ve all heard the truism “you can’t improve what you can’t measure.” But first, you have to agree on what to measure. For all the attention paid to care coordination and the consensus that it’s essential to improving quality and lowering costs, the health care community has struggled with just how and what to measure.

¹ CCMC, Definition and Philosophy of Case Management
to improving quality and lowering costs, the health care community has struggled with just how and what to measure.²,³

“We all know anecdotally that coordinating care is valuable to our clients, but we can’t quantify the value of care coordination without measures,” says Patrice Sminkey, chief executive officer of the Commission for Case Manager Certification. “Both care coordination itself and how to measure it are still maturing fields, and there is no single measurement standard that can be applied universally.”

In 2010, the Agency for Healthcare Research and Quality published a roadmap for understanding and evaluating the usefulness of care coordination through measurement. AHRQ’s Care Coordination Measures Atlas parses the applicability and value of a wide variety of measurement tools. The Atlas is a freely available, one-stop shop for validated care coordination measures—a vital reference for care managers and those who hire and supervise them.

Measurement can be used internally for performance evaluations and to benchmark quality, whether for care teams, units or individual providers, explains Ellen Schultz, MS, the Stanford researcher who led development of the Atlas. It can help identify areas for improvement, guide improvement plans or evaluate the success of a particular initiative. She offers some scenarios:

■ “Management wants us to improve team communication. But how do we know what to change?”

■ “We’re trying a new discharge planning process. How will we know if it’s working?”

■ “Our team gets good feedback on our work, but how can we quantify the quality of our care planning?”

The Atlas was created to serve as a resource for those seeking to measure key care coordination processes. And like care coordination, the Atlas is evolving. When it was launched in 2010, it contained 61 measures and was in a paper-based format. An updated version includes 101 different measure instruments, and features new information on EHR-based measures. And later this year, AHRQ will launch an online database version. The database version, like the current version, will be available at www.ahrq.gov/professionals/systems/long-term-care/resources/coordination/atlas/index.html. As the field evolves, so will the Atlas.

“We all know anecdotally that coordinating care is valuable to our clients, but we can’t quantify the value of care coordination without measures.”

—PATRICE SMINKEY, CHIEF EXECUTIVE OFFICER OF THE COMMISSION FOR CASE MANAGER CERTIFICATION

“Communication is crucial to so much of what care coordination is all about.”

—ELLEN SCHULTZ, MS

Building the Atlas

The Atlas catalogues publicly available, validated measures applicable to ambulatory care, including transitions to/from hospital or long-term care. It focuses on measuring those processes.

To catalogue measures, one must first define care coordination. Schultz and her team worked from the same definition the Commission identifies in its Case Management Body of Knowledge® online education resource. Care coordination is the deliberate organization of patient care activities between two or more participants (including the patient)
involved in a patient’s care to facilitate the appropriate delivery of health care services. Organizing care involves the marshaling of personnel and other resources needed to carry out all required patient care activities and is often managed by the exchange of information among participants responsible for different aspects of care.4

Schultz and her team identified existing measures of care coordination processes published in the peer-reviewed literature, available online or suggested by a panel of stakeholders. They then assessed and categorized those measures according to the aspects of coordination measured, patient populations to whom they have been applied, settings where they have been used, and the types of data used.

From there, they developed a framework for understanding care coordination measurement, incorporating elements from other proposed care coordination frameworks whenever possible. The Atlas’s framework is designed to support current and future development of care coordination measures, while remaining flexible so it may be adapted as the field matures.5

The Atlas’s framework domains fall into two categories:

5 Schultz EM, Pineda N, Lonhart J, Davies SM, McDonald KM. op cit.

- Coordination Activities—Ad hoc actions taken by individuals; just-in-time, as needed, improvised or routine:
  - 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—Collective actions supported by system infrastructure; protocols, communication channels, partnerships, networks:
  - Teamwork focused on coordination
  - Health care home
  - Care management

These domains will be familiar to case managers, Schultz explains. They align with the case management process (figure 1, next page).

Overall, most of the measurement instruments catalogued in the Atlas measure communication in some way—both information transfer and interpersonal communications, she says (figure 2, see page 5). That’s not surprising, says Schultz: “Communication is crucial to so much of what care coordination is all about.”

And to what case management is about, Sminkey adds. Ensuring clear communication—with the
patient, within the health care team and across practice settings may be the most important element of care coordination in transitions of care. Conversely, poor communication can lead to frustrated patients and families, decreased quality of patient care and suboptimal health outcomes.

Using the tools

Many of the measures include resources for putting them to use, Schultz says. In those cases, the Atlas includes links to the supporting materials (e.g., a user’s guide). In other cases the developers—often researchers—are willing to answer questions or connect users to organizations that can provide support. An appendix to the Atlas, available online, includes copies of the measure instruments and information about how to contact measure developers for most of the measures within the Atlas.

When using these or any measurement tools available in the Atlas, it’s important to use them as intended. Schultz says to keep in mind that many of these tools were developed to assess multiple functions; for instance, one survey may measure more than care

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**Atlas Activity Domains**

| Establish accountability or negotiate responsibility | Assess needs & goals | Support self-management goals |
| Communicate | Create proactive plan of care | Link to community resources |
| Facilitate transitions | Monitor, follow-up and respond to change | Align resources with patient & population needs |

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**Case Management Process**

High Level

- Screening
- Assessing
- Planning
- Implementing (care coordination)
- Following-up (ongoing)
- Transitioning (transitional care)
- Evaluating

Stratifying Risk

Communicating Post Transition

Source: The Commission’s Case Management Body of Knowledge. ©CCMC 2011. All rights reserved.

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**“What parts of your work are being measured? What’s not being measured?”**

—ELLEN SCHULTZ, MS
coordination, and some of the questions may seem irrelevant to your team’s needs. But that doesn’t mean you can cherry-pick elements, Schultz warns. “We encourage everyone to use the entire measurement tool. If you pull out individual items, you remove the context and may not measure what you think you are measuring.”

Moving forward: have a say in what gets measured

Professional case managers should ensure that the right instrument designed to measure care coordination is in place because, Schultz explains, “what gets measured gets attention.” That’s why it’s important to understand what measures are being considered or used in your own work setting.

The first step is to look at the functions being measured, Schultz says. “What parts of your work are being measured? What’s not being measured?”

Case managers should have a say in the kinds of measures their organizations choose to pursue. “You need to be able to point to the measures that will best capture what you are doing,” says Sminkey. Within their organizations, professional case managers should be able to point to those validated measures in the Atlas and elsewhere, understanding their value and use. This is how case managers become active participants in advancing the art and science of case management.

Schultz offers a few tips for how to become involved in determining what gets measured:

- Volunteer for local and/or organizational committees;
- Start discussions with co-workers or supervisors; and
- Make suggestions for what’s important to measure.
Doing this supports the profession and provides an important opportunity to build visibility and awareness while, at the same time, helps to transform health care delivery, Sminkey says. “As I’ve said many times before, ‘Care coordination equals case management equals the Commission.’ We need to continue to deliver that message and to demonstrate the value of what we do.”

Focusing on a moving target

Measuring care coordination is a moving target. Schultz and her co-authors acknowledge the Atlas “represents early efforts in an emerging field”:

Care coordination is a complex concept, intertwined with many other concepts relating to quality, delivery, and organization of care. In its broadest sense, almost all aspects of health care and its delivery can be understood as part of care coordination. A very narrow definition, on the other hand, might encompass only a few of the domains included in the measurement framework presented in this report. The scope of the Atlas is purposefully broad in an attempt not to limit, but instead to stimulate, further thinking about which measures are most salient and useful to those working to improve the coordination of care. This Atlas, and the measures it contains, represents early efforts in an emerging field.6

Moving forward, Schultz expects to see new measurement tools exploring novel ways to gather data, or emerging models and functions that involve care coordination. Among them:

- EHR-based measurement
- Patient engagement and whole-person care

The "health neighborhood" and the importance of clinical-community relationships

Goal-setting and comprehensive care planning

Shared accountability

Across the health care continuum, the Affordable Care Act has advanced accountability through financial penalties and incentives. It follows, then, that case managers are increasingly being asked to validate their value to the organization. One challenge facing the Commission—and the professional case manager—is how to demonstrate and quantify value. “Certification takes us part of the way, demonstrating our value to our employers, patients and communities,” Sminkey says. But measuring care coordination activities in the care setting is becoming increasingly important and expected.

To do that, organizations need valid, verifiable tools with which to measure. That’s where the Atlas comes in.

“In an increasingly complex health care environment, the professional case manager connects patients and families with providers and resources across care settings. Professional case managers are uniquely positioned to coordinate care—to serve as the hub to which all parties connect,” Sminkey says. “We know our value. Our clients and their families know our value. Our colleagues know our value. Now it’s time to demonstrate this value in concrete, quantifiable ways.”

Resources


Care Coordination Accountability Measures for Primary Care Practice: http://www.ahrq.gov/research/findings/final-reports/pcpaccountability/index.html

Prospects for Care Coordination Measurement Using Electronic Data Sources: http://www.ahrq.gov/research/findings/final-reports/prospectscare/index.html


Ellen Schultz, MS

Ms. Schultz is a researcher at Stanford University focusing on quality measurement and care coordination. Her research on care coordination includes both conceptual work around a framework and definitions, exploration of the evidence base for care coordination, and extensive searches for measures of care coordination. She led development of the Care Coordination Measures Atlas, a toolkit of quality measures related to care coordination, and a forthcoming searchable database of care coordination measures. Some of her other work on care coordination has assessed the potential for using health information technology, such as electronic health records, to both facilitate coordination and measure coordination processes, as well as other novel approaches to quality measurement. She is a member of the National Quality Forum Care Coordination Steering Committee, which reviews and endorses quality measures for quality improvement and public reporting, among other uses. In other work, she has developed quality indicators to assess community health, the health and well-being of Medicaid home- and community-based services beneficiaries, lung cancer care and the quality and accessibility of ambulatory care.

Patrice Sminky, chief executive officer, Commission for Case Manager Certification

Sminkey comes to the Commission from URAC, where she most recently served as senior director of sales. Prior to that, she was senior vice president, operations and client management, Patient Infosystems in Rochester, N.Y. She brings a proven track record in operations management in small and large operations, multilevel services and cross-functional teams. She has extensive experience in client management and coordination, including marked improvement in client retention, timely and fiscally sound program implementation and an expanding book of business.

As chief executive officer, Sminkey oversees the management of all activities related to the Commission’s operations, including all programs, products and services; and the provision of quality services to and by the Commission. She is a direct liaison to the Commission’s Executive Committee. She works with the Commission’s volunteer leadership to evaluate and develop potential new products for implementation by the Commission, and she establishes and maintains communication and working relationships with other organizations, agencies, groups, corporations and individuals.

She holds a diploma of nursing from the Chester County School of Nursing.