The healthcare industry has embarked on a journey to new payment models for providers aimed at promoting greater care coordination under the rubric accountable care. Payments from government and commercial payers will be increasingly at risk and based on performance rather than on a set fee for service. For hospitals and physicians, this change means a shift to a value orientation, increased transparency, and the assumption of financial risk as these providers come together to form accountable care organizations (ACOs) and other collaborative arrangements in response to these new payment models.

What is needed to succeed in this new accountable care environment? And what is common to these new payment models? The answer to both questions is what many refer to as “clinical integration”—in essence, bringing providers together to manage care in a more standardized, coordinated, effective, and efficient manner.

Clinical Integration Defined

The term clinical integration has seen widespread use, but it has tended to be only vaguely defined, and no single definition is generally accepted as being the correct one. The Federal Trade Commission (FTC) has offered one of the most precise definitions, describing four primary characteristics of clinical integration:

> The ability to achieve significant clinical and economic efficiencies
> Broad physician representation and physician investment
> A well-developed care management program that uses evidence-based guidelines
> A data management system that enables extensive data collection, information sharing, and utilization review

Often a clinically integrated physician-hospital organization (PHO) or independent practice association may pursue joint negotiation of payer contracts pursuant and ancillary to the clinical integration program.

Functionally, clinical integration programs can have a broader definition, reflecting the broad objectives of accountable care: to be able to deliver the

5 pillars of clinical integration

A healthcare organization’s ability to succeed in a world of accountable care will depend on the extent to which it has developed an effective clinical integration program.
right care, at the right time, in the right place, with seamless coordination of care delivery. Successful clinical integration programs have undertaken many steps to reach this level of care coordination:

> Implementing ongoing care management quality initiatives, driven largely by adoption and implementation of clinical guideline and protocols
> Engaging physicians in adopting these guidelines and protocols through the use of aligned incentives
> Monitoring and enforcing physician compliance with the care management programs
> Engaging payers in new payment models (e.g., pay-for-performance, bundled payments, shared savings)

These steps underscore the fact that implementing a clinical integration program is a substantial endeavor. Whether this effort will be successful will depend on how effectively the organization invests its time and resources in five key areas:

> Physician leadership
> Physician-led care management
> Quality monitoring
> Patient information and data sharing
> Payer engagement

**Physician Leadership**

It is essential to have a clear vision and plan for involving both employed and voluntary physicians in the clinical integration program development and governance. Success will depend on the degree to which the organization is able to secure both buy-in and compliance on the part of the participating physicians.

**Physician buy-in.** Active physician participation in the clinical integration program is central to all successful clinical integration initiatives. Physician engagement can be fostered through strong physician leadership, participation in program development, research and adoption of evidence-based decision making and an integrated, multidisciplinary approach to engagement.

**Physician compliance.** Participating physicians should not only “talk the talk,” but also “walk the walk” by making full use of the tools that the clinical integration program provides to them and fully embracing the culture and requirements of an accountable care environment. For example, compliant physicians:

> Use hardwired, evidence-based clinical guidelines to support real-time clinical decisions
> Review reports of physician adherence to guidelines to compare their own performance with that of their peers
> Work to improve both individual and organizational performance
> Participate in clinical integration committees and meetings
> Recognize that underperformers can be eliminated from the clinical integration network if unwilling to work toward improvement

Achieving this level of compliance requires a comprehensive effort to fully engage physicians. This effort often begins with a focus on communication and education, followed by active involvement in the development of program details.

**Physician-Led Care Management**

Care management programs aim to improve quality and health outcomes by delivering evidence-based, streamlined, value-driven health care to an organization’s patient population.

Typically, care management initiatives target populations and conditions that affect a significant number of an organization’s patients, account for a large percentage of healthcare costs, or have a treatment pattern that varies significantly from evidence-based guidelines. Although these programs are developed by physicians, they are often implemented by nurses and other clinical staff.

Due to the significant resource investment associated with the development and implementation of a comprehensive care management program, organizations should select a manageable number of initiatives to pursue each year, based on available infrastructure, time, and financial resources. These may typically include guidelines and disease management programs around diabetes, congestive heart failure, and chronic...
obstructive pulmonary disease, and guidelines on immunizations.

Quality Monitoring
A comprehensive quality-monitoring program is central to a successful clinical integration program. Under such a program, quality measures are developed to monitor both individual provider performance and the program as a whole.

Provider performance measures should promote guideline compliance and provider accountability and serve as a basis for quality incentives and rewards. The key focus of program measures of effectiveness should be to determine whether the clinical integration initiative has been successful, identify areas of future opportunity for continued improvement, and build an evidence base for what is and is not effective.

Measures should fit with the specific care management initiatives being pursued by the organization, and should be established through a collaborative, physician-led process.

An effective approach to monitoring quality involves not only measuring performance, but also rewarding excellence. Physicians should be informed of the care management program that the organization has adopted, with an explanation of its relevance to each clinical specialty.

Physicians should also be educated regarding the methodology used to measure their performance in these programs. Once thoroughly aware of the programs and measures, physicians should be held accountable for their performance.

Many organizations have found that physician report cards are an effective tool for tracking physician performance. The measures can vary from administrative to clinical in nature, and can be based on quality and utilization metrics.

Successful clinical integration efforts often link individual and/or group performance to financial incentives.

Patient Information and Data Sharing
The success of a clinical integration program also depends on the organization’s ability to share patient data across the continuum of patient care. At a minimum, this sharing should occur within the organization; ideally, it would occur among other organizations delivering care to the same patient.

<table>
<thead>
<tr>
<th>Care Management Program</th>
<th>Targeted Population</th>
<th>Program Focus</th>
<th>Covered Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disease Management</td>
<td>Patients with well-defined clinical diagnoses for which there are evidence-based guidelines for care</td>
<td>Educating and coaching patients to be active participants in their own care to enhance compliance with their treatment plan and reduce avoidable care costs</td>
<td>Diabetes, Congestive heart failure, Chronic obstructive pulmonary disease, Asthma, Lower-back pain, Depression</td>
</tr>
<tr>
<td>Case Management</td>
<td>Patients with complex medical needs</td>
<td>Identifying complex and high-cost patients</td>
<td>Multiple trauma, Cancer, End of life</td>
</tr>
<tr>
<td></td>
<td>Focused usually on more acute episodes of care</td>
<td>Coordinating care across the spectrum of care, Supporting and advocating for the patient and caregiver</td>
<td></td>
</tr>
<tr>
<td>Utilization Management</td>
<td>Population based</td>
<td>Applying evidence-based clinical guidelines to measure and manage healthcare costs</td>
<td>Reduced lengths of stay, Use of generic medications</td>
</tr>
</tbody>
</table>
Community hospitals that are developing clinical integration programs typically have a mix of technology to support clinical integration. Some hospitals and physicians may have a shared electronic health record (EHR), while others may have disparate EHRs and practice management systems organizationwide. A few providers will establish new information systems or health information exchanges, while others will build onto existing internal systems.

With respect to product requirements for data solutions, the data and information sharing strategy for clinical integration should take into account FTC guidelines and functional clinical integration considerations.

Clinical integration functionality is achieved through:

- Practice management tools (billing, scheduling, referrals)
- Care management tools and clinical decision making tools (e.g., EHRs, disease registries)
- Provider communication tools (document exchanges, messaging)
- Patient engagement tools (web-based personalized health records)
Population management capabilities (e.g., tools to better manage and engage patients)

In most cases, the best approach for developing an effective clinical integration data strategy is to build on capabilities and technologies that are already in place. These elements may include the following.

**EHRs.** In this instance, EHR refers to a centralized record with unique patient information accessible from the point of care or location.

Typically a hardware-based system, an EHR provides the greatest functionality, but if the organization has not already installed this technology, or made substantial headway in doing so, its cost and time to implement may be prohibitive.

**Disease registries.** This solution refers to a web-based system used to record data for patients with a particular diagnosis, such as diabetes. Disease registries provide a rather simple implementation plan and are less costly than the other potential data solutions, but they are limited in their ability to support the broad functional areas.

**Data integrator software.** These software-based solutions can pull disparate sources of information together from multiple care settings. They are limited, however, in that they usually cannot serve as data warehouses or store information.

**Outsourced data support.** In some instances, organizations can benefit from outsourcing data processes such as data integration, data warehouse management, and data analytic support.

**Payer Engagement**

As discussed previously, healthcare reform and overall market dynamics are pushing payment mechanisms away from pure fee-for-service toward accountable care models that focus on overall value, population health, and performance. Organizations with successful clinical integration programs can thrive in this changing environment because they are able to create and demonstrate value. In addition to traditional fee-for-service contracts, these organizations may pursue alternate payment arrangements based on their proficiency with clinical integration. Examples include participation in Medicare’s shared savings initiative as an ACO or similar initiatives that are being pursued by commercial payers.

An organization that has developed an effective clinical integration program can reach out to

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### RELATIVE FUNCTIONALITY OF FOUR DATA SOLUTIONS

<table>
<thead>
<tr>
<th>Functionality</th>
<th>EHR</th>
<th>Disease Registries</th>
<th>Data Integrators</th>
<th>Outsourced Data Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice management</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Billing support</td>
<td>■</td>
<td></td>
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<tr>
<td>Referral management</td>
<td>■</td>
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<tr>
<td>Care management</td>
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<td></td>
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<tr>
<td>Case management: electronic documentation and reporting</td>
<td>■</td>
<td></td>
<td></td>
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<tr>
<td>Workflow: guidelines/standards/reminders</td>
<td>■</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Utilization management</td>
<td>■</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disease management</td>
<td>■</td>
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<td></td>
<td></td>
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<tr>
<td>e-Prescribing</td>
<td>■</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider communication/coordination</td>
<td>■</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Patient engagement</td>
<td>■</td>
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<td></td>
</tr>
<tr>
<td>Population management</td>
<td>□</td>
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</tbody>
</table>

**Key**

- ■ Potential Full Functionality
- □ Some Potential Functionality
- □ No Potential Functionality

These four data solutions offer a variety of potential for functionality in support of key activities required for accountable care.
payers, letting them know about the program’s efforts and outcomes. It is important to establish an ongoing dialogue with the payers around clinical integration, so that once the organization determines it has met the clinical integration criteria, it is well positioned to pursue more serious discussions with the payers.

Organizations that have clinical integration programs also should consider submitting documentation of their programs to the FTC to get an advisory opinion on whether they have met the agency’s clinical integration criteria. The FTC test focuses on whether the organization requires joint contracting (e.g., with physicians) to support the clinical integration program and its objectives. Although a favorable FTC opinion is not required for joint contracting, it provides considerable protection for clinical integration programs that want to contract in this way.

Finally, organizations with clinical integration programs should pursue contracting that recognizes the value of such a program. Organizations may choose to pursue different payment arrangements with their contracted payers based on factors such as the payer’s number of covered lives, the opportunity for both the clinical integration program and the organization, and the payer’s interest. The organization may also move to new contracts on an incremental basis to manage its risk.

**Value-based contracts.** An organization can promote the value of its clinical integration program in discussions with payers. Value-based contracts, which may be jointly negotiated for physicians and hospitals, may include quality incentives as well as nonpayment for complications, errors, and readmissions. These contracts reward physicians and hospitals for providing the right care and the right amount of care, rather than for simple productivity.

**Full-or shared-risk clinical integration contracts.** An organization with a fully developed clinical integration program can decide to assume financial risk, which may range from limited capitation on certain services to full capitation for a defined population. Arrangements under the Medicare Shared Savings Program, or ACO arrangements, essentially fall into this category. In these arrangements, the organization relies on its clinical integration program to generate savings, which the organization will partially retain.

**Cost Considerations**
Clinical integration programs require the commitment of human, financial, and technology resources, as well as broad support from management and the physician community. Resource needs and costs depend on the organization’s current population health management capabilities and the overall size of the program to be built.

**Staffing.** Dedicated staff (not necessarily full time) is needed in several areas. The clinical integration program development is lead by the executive director, while the clinical components are managed by the medical director. Most of the staffing consists of care management staff, typically registered nurses.

**IT and data analytic tools.** New data and IT resources needed for the clinical integration program depend on what is currently available within the organization and the physician community, as well as the selected data strategy and the comprehensiveness of the integration. The need for capital investment in IT varies widely among organizations, and may be significant. Ongoing operating costs may also be sizable.

**Physician effort and incentives.** To participate in building and maintaining the clinical integration program, physicians must take time away from clinical practice. The organization may consider compensation for this time and effort to gain broad participation in the physician community.

The organization also may promote clinical quality through incentives to physicians for participation in care management activities, such as entering patient data into disease registries, developing and updating care plans, and leading end-of-life discussions with patients. Funding for these incentives may come from performance-based or risk contracts.
Legal and consulting fees. Navigating the regulatory requirements of clinical integration, especially if the program wants to seek an FTC opinion, will likely require outside expert legal counsel. Also, the organization may seek external support and guidance for designing and building the clinical integration program, including determining the necessary organizational structures, developing business and operational plans, designing the information and data systems, and selecting IT products.

Case Example: A Perspective on Clinical Integration Costs
To illustrate the range of expenses that can be required to support a clinical integration program, consider a hypothetical program at "Community Hospital."

Let’s say Community Hospital’s situation at the time it embarked on its clinical integration program was as follows:
> The hospital’s traditional medical staff comprised about 200 active physicians, about 90 percent of whom were in small independent practices.
> The hospital has undertaken medical management efforts on the inpatient side, including a hospital-based utilization management program to meet managed care demands and a program for follow-up on patient visits to the emergency department.
> There are several outpatient education efforts around diabetes and congestive heart failure, but there are no disease or case management initiatives.
> Community Hospital implemented an EHR in the past year, which is used by most of the employed physicians but by few independent physicians. The voluntary staff’s connection to the hospital EHR is limited to a web portal that allows viewing of hospital radiology and lab results.
> Ninety percent of the active medical staff are members of Community Hospital’s PHO, whose activities have been limited to credentialing and cumbersome messenger model contracting.
> Community Hospital has taken initial steps to develop physician report cards, focused primarily on inpatient metrics.

Like many organizations, Community Hospital has decided to use the PHO to manage its clinical integration initiative. Under this approach, Community Hospital will need to dedicate about four FTEs to the initial phases of building the program, mostly falling in the care management staff category.

Developing and implementing the PHO’s IT strategy is an important step. Costs can vary widely depending upon the strategy pursued. Community
HOSPITAL AND ITS PHO WILL LIKELY REQUIRE SIGNIFICANT INVESTMENT GIVEN THE LACK OF ELECTRONIC INFRASTRUCTURE AMONG ITS MEDICAL STAFF. WITH A LARGELY VOLUNTARY MEDICAL STAFF, THIS INVESTMENT MAY INCLUDE EHR SUBSIDIES CONSISTENT WITH MEANINGFUL USE REQUIREMENTS. AT A MINIMUM, COMMUNITY HOSPITAL WILL NEED A HEALTH INFORMATION EXCHANGE TO CONNECT TO THESE INDEPENDENT PHYSICIANS.

The PHO also will need to consider whether to compensate physicians for their time in developing the clinical integration program and whether to institute care management incentives. These decisions should take into account not only available funds, but also the level of physician support for the effort and the strength of their relationship with the PHO. Compensation may be unnecessary to elicit physician involvement if physicians are eager to participate in PHO committees. Conversely, if physicians are not closely tied to the PHO, compensation may be necessary to offset lost productivity due to PHO activities.

Estimates for the development of this clinical integration program, shown in the exhibit above, range from more than $1 million to as much as $4 million, with the largest variation relating to the approach taken to IT. These expenses are incremental to the current costs of the PHO.

The Cost of Inaction
The resources needed to build a clinical integration program are significant, but inaction may well prove more costly. The world of accountable care is here to stay. Organizations that continue to operate in the traditional model of care will be unable to meet demands for value, and remain reliant on dwindling fee-for-service payments. Although healthcare organizations may not need to pursue an FTC advisory opinion, they should prepare for the impending new payment models that require clinical integration. This transition is not just about payments; it is also about providing high-quality care—the goal that hospitals and physicians work toward every day.

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