Health Access SOLUTIONS

Multidisciplinary clinical integration for genuine care coordination

Patient-centered models require an intelligent information infrastructure

By Daniel Morreale

Regardless of how the political dust ultimately settles, there can be little doubt that healthcare in the United States is undergoing a seismic reformation – a paradigm shift in the truest sense.

Almost without exception, the American population and its leaders agree the current approach to the delivery and reimbursement of healthcare is unsustainable. It's likewise accepted that our fragmented delivery and reimbursement model must be made more cohesive if we are to assure access, improve quality and reduce costs.

While pundits and politicos are squabbling over the best path towards these objectives, the industry itself is exploring new solutions to old problems – and, in the process, shifting the axis around which healthcare rotates.

The transformation from provider- to patient-centric care

Traditionally, healthcare has been a provider-centric endeavor. But, increasingly, visionaries recognize that the most effective – both from a clinical and cost perspective – model is patient-centric, where care decisions revolve around keeping the patient as healthy as possible for as long as possible and avoiding expensive, episodic events. Multidisciplinary models of care such as Patient-Centered Medical Home (PCMH) and Accountable Care Organizations (ACO) are designed to do just that, harnessing the power of collaboration among primary care providers, specialists, hospitals, health systems, payers and patients to deliver focused and coordinated care. Achieving this focus requires a longitudinal view of all data relevant to each individual, allowing those involved in care decisions and delivery to manage, treat, track and report on every patient at every point of service in the acute, sub-acute, ambulatory or home setting.

This, in turn, requires an entirely new information infrastructure. To date, patient information is honey-combed throughout the healthcare system. Each physician, each hospital and each payer "owns" a discrete, self-contained set of patient data that has been recorded either on paper or electronically. The walls of each enterprise separate the data sets, inhibiting the flow of information between cells.

The demands of patient-centered healthcare, however, compel traditional "data owners" to make this information not only viewable and accessible to their counterparts along the care continuum, but to ensure it is meaningful and usable.

Emerging information infrastructures

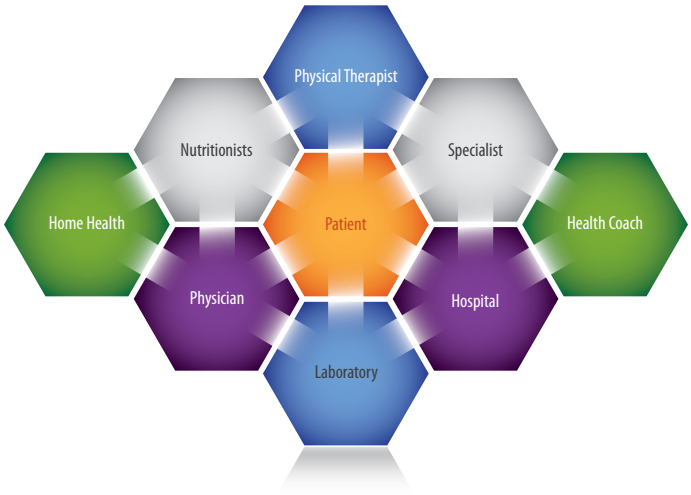
For the past decade or so, industry experts believed electronic health records (EHR) and health information exchanges (HIE) offered the functionality to support genuine data sharing. More recently, however, forward-looking leaders have recognized that these technologies fall short of the overarching goal.

Clinicians in both acute and ambulatory settings that have adopted EHRs have been frustrated by system limitations such as poorly designed software, time-consuming data entry and inadequate reporting – not to mention unfulfilled promises of electronic integration of lab or radiology results, accurate medication reconciliation, timely clinical alerts, and effective population management tools. Compounding these disappointments is the fact that data – digitized or not – remains locked in silos. As an antidote, healthcare initially turned to HIEs for fundamental connectivity. HIEs play significant roles as the pipeline enabling organizations to build a basic communications infrastructure. On their own – and even in conjunction with EHRs – HIEs cannot create the level of clinical integration required to coordinate care across the continuum. More extensive functionality is required.

The inadequacy of current health information technology (HIT) solutions will become increasingly apparent as ACOs and PCMHs – or their successors – arise and mature. The current episodic approach to care offers very little opportunity or motivation for the provider to take ownership of a patient's overall health and to work collaboratively with associates. In addition, today's environment requires many blind "handoffs" between clinicians, each of which is a potential opportunity for catastrophic failure.

More appropriately, recent collaborative delivery systems – originating with disease management programs and Pay for Performance initiatives, and moving towards PCMHs and ACOs – enable a relational view of medicine. Providers are encouraged and financially incentivized to take on greater responsibility for the patient's condition. At the same time, evolving approaches invite patients to play a greater role in their care and likewise consider input from health plans and payer organizations regarding better strategies for prevention, chronic care management and cost efficiencies along the continuum of care. The greatest potential for cost savings is to preserve wellness while identifying – and addressing – risk factors portending the development of chronic conditions. Likewise, costs can be significantly reduced by moving patients who are chronically ill to being episodically ill, and then by moving patients from episodically ill back to wellness.

In order for this type of patient-centric model to flourish, however, an intelligent information infrastructure is required. Multidisciplinary coordinated care platforms—designed with the express purpose of enabling communication and collaboration both within and beyond the walls of an enterprise—can leapfrog over the acknowledged limitations of traditional HIT. They support authentic clinical integration, delivering usable data to all stakeholders engaged in healthcare transactions – from the patient, to various providers, to health plan administrators.



The value offered by a multidisciplinary care coordination platform

For the healthcare industry to achieve its goal of sustainability through improved care and reduced costs, it is imperative to leverage the massive volumes of patient data residing in hospital repositories and provider offices. Clinical information is a special type of asset; It is one that increases in value the more it is used and shared.

Consider, for instance, how much more valuable health information would be if it could be comprehensively viewed and analyzed. HbA1c levels taken during primary care and endocrinology office visits, for instance, could be trended with any unscheduled encounters at the ED and daily patient self-testing to provide a better picture of the diabetic's current condition.

Disparate technologies, even within a health system, often rely upon varying formats and nomenclature and may assign disparate values to health data. Lab results from different systems that use different reference ranges and names may not be recognized when information is exchanged. "I potassium," for example, may be referred to by one laboratory as "K," while another may report it as "POT." The lack of standard nomenclature is one of the most apparent challenges in sharing data. A common syntax is still missing, and data which is syntactically and contextually based is almost nonexistent.

Multidisciplinary and team-based coordinated care depends on solutions able to translate data and facilitate collaboration. Communication among caregivers associated with multiple disciplines is perhaps the greatest need. In addition to the actual tools required to facilitate caregiver interaction, processes (who, what, where, when, how) must be well-designed and executed. Efficient protocols are crucial, especially if a patient is receiving care from multiple providers where harmful drug interactions may become an issue.

Patient engagement and population management

Clearly, the opportunity for patients, providers and payers to consult with one another and share insights can only be good for healthcare – both from a quality and a cost perspective.

Patients, for example, have traditionally had little opportunity to provide input into their care plans. Since engaging patients is a pillar of ACOs and PCMHs, technology is rapidly evolving to support this increasingly important functionality. Among the preeminent solutions are personal health records (PHR), which feature patient-set security controls, and allow individuals to:

- request appointments, refills and renewals;
- submit demographic and insurance information;
- automatically upload readings from home monitoring devices such as glucometers and BP
- receive lab results and treatment updates; and
- explore diagnostic and therapeutic options.

How much more valuable is this functionality when it integrates information from all care team members? Coordinated solutions likewise generate alerts and notifications to help providers and patients better manage their care. Providers are automatically reminded if patients are overdue for routine tests, or have overlooked a preventive service or failed to fill a critical prescription. Patients, too, can receive these notifications – by mail or electronically – and therefore stay on top of their wellness or disease management programs.

A system that provides connected care to patients doubtlessly can lead to improved care – and therefore improved health. But this level of one-on-one information can be expanded for added value. With greater volumes of data available, members of the care team not only get a more comprehensive view of an individual patient, but they can more accurately assess patient populations, as well. For example, PCPs, are better able to monitor compliance with recommended immunization schedules among patients younger than six and launch education and outreach programs to increase vaccinations. In short, technology that enables genuine care coordination means providers and payers are able not only to see the trees, but the entire forest – achieving more effective disease management.

From vision to reality

Given today's healthcare environment, what does the ideal health information solution look like?

Several models are currently available. The most effective, however, are designed to leverage data to provide true clinical decision support in a collaborative care environment. Some "traditional" vendors may offer add-on modules and claim the ability to transform monolithic delivery systems into a workable multidisciplinary solution, but this approach risks interoperability and implementation problems. A more enlightened option may be a multidisciplinary care coordination platform that delivers to the entire care team the medical knowledge required to produce healthier patients. Such platforms must encompass the functionality to:

- Support the interoperability of systems and information exchange;
- Conform to current HIPAA-related requirements for security and privacy;
- Incorporate the fragmented healthcare payer system to coordinate – or delegate – the management of access, utilization and case management services for beneficiaries;
- Engage patients and family members in wellness and care activities through online and interactive voice response (IVR) technologies;
- Normalize data across multiple, disparate information silos;
- Define multidisciplinary care teams and support their various views, workflow and data sharing requirements – regardless of their organization affiliation;
- Automate clinical decision support, alerts and notifications based on evidenced-based guidelines and clinically relevant context;
- Create real-time dashboards for quality metric tracking with links to patient-level and population-level reporting.

In short, getting to coordinated care – the goal of new patient-centric models – requires a highly evolved HIT solution. Healthcare leaders must look beyond information silos and limited health information exchange and adopt long-term strategies for multidisciplinary care, including implementation of clinical care management platforms.

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