

Advance Decision Support Systems More Help Is on the Way

Now is an exhilarating time to be involved with healthcare information systems. Data-driven decisions continue to grow in importance as healthcare leaders move the business forward and clinicians strive to deliver top-quality care based on cost-aware decisions.

Recent investments in electronic health records (EHRs) and enterprise systems have laid the foundation for advanced decision support systems to effectively merge clinical and financial data to drive much-needed action. Maintaining separate decision support systems for the clinical and financial realms remains the norm for most providers. But there's pressure from both sides to develop better ways to share information to facilitate improvements across the board.

Where We Are Now

Following the trend of computerization overall, healthcare information systems are collecting and handling more data with each passing day. And that's good news for healthcare leaders trying to make well-informed, cost-aware decisions about both clinical care and running the business.

As the industry moves from fee-for-service payment toward value-based payment models, a much wider audience is showing keen interest in cost data and financial decision support. "In addition to the ongoing major shift from reimbursement to bundled payments, value-based care margins are dropping at a rate that providers didn't anticipate," says Tushar Pandey, vice president of decision support at Strata Decision Technologies, Chicago. "And that's changing the mindset of providers from 'The more we do, the more we get paid,' to 'Before we jump in, we need to understand what we're doing, why we're doing it, and how it will affect the new value equation,

improving quality and lowering costs,' because that information has significant implications on their margins and patient outcomes," he says.

Previously, when cost wasn't a factor in treatment, the cost of U.S. health care skyrocketed, Pandey observes. "Now physicians want to be part of that conversation; they want to be educated about the implications their decisions have on the financial performance of a hospital," Pandey says.

One result: The cost and performance data now have a much wider audience. "The audience has shifted from purely financial to now include operational, clinical, strategic planning, pricing, reimbursement, and others," Pandey says. "And this expanded audience is looking for a much deeper understanding of costs. Understanding true variation from patient to patient based on choices made is mission-critical."

Beyond that, providers are working toward linking to cost information in EHRs at the point-of-order entry. "This approach ultimately will lead to a change in ordering behaviors and, thus, lower costs," Pandey says.

Where We're Going

The demand for more comprehensive clinical support systems also is strong, with regulations on the horizon that will require their use in specific areas. After some health systems and hospitals found their newly acquired EHRs had

decision support capabilities but lacked requisite sophisticated content to put those capabilities to effective use, many began developing their own content or reaching out to third parties to do so. Some organizations have taken it upon themselves to develop content in specialized areas.

One of the more common current applications of clinical decision support is in reducing inappropriate utilization. "Everyone is going to have to pay attention to clinical decision support," says John Kontor, MD, executive vice president of Clinovations within Advisory Board. "CMS has clearly indicated that it's going to require decision support. And that policy is driven by more than just the desire to promote quality care. CMS clearly is trying to reduce its spending on inappropriate utilization of high-priced diagnostics and therapeutics, which is a laudable goal."

Radiology is one of the earliest fields being affected by this move. Program implementation has been delayed until 2019, but it eventually will require that ordering providers use electronic clinical decision support mechanisms to check that the appropriate criteria have been met before ordering advanced imaging exams for Medicare patients. This step will allow radiologists and other imaging providers to check against appropriate use criteria (AUC) developed by the American College of Radiology, which can be integrated into most EHRs. Medicare payments may be denied if the provider does not verify having checked the imaging AUC.

"There's also a lot of interest in leveraging clinical support tools to promote adherence to care pathways," Kontor says. "One very interesting growth area in support—perhaps the most difficult one—is the challenge of how you use clinical decision support to promote adherence to broad care paths. For example, consider the clinical context of how you appropriately manage a bypass surgery patient. This goes from figuring out who needs surgery, to determining the type of surgery, taking care of all the pre-op risk management, managing them in-house, and then figuring out their discharge disposition. We think

that's the next frontier and where there will be significant investment by vendors, payers, and providers to get that right."

One key point not to be overlooked is the need for staff—the human infrastructure—to run and maintain decision support programs. "You must curate the process and monitor which alerts are working and which your clinicians are ignoring all the time," Kontor says. "Then, you must continuously iterate on the information and the structure of the alerts you are providing for your physicians and other end users."

One of the beauties of good decision support systems—both financial and clinical—is that they provide the right lens for providers' decision-making. They also provide access to a collection of data that people didn't have before.

"Finance's role is to improve margins. The clinician's goal is to provide better quality of care. And they really haven't met eye to eye before," Pandey says. "Right now, we have a unique opportunity to collaborate to solve this huge problem that exists in health care, which is finding a way to bend the cost curve. Finance and clinicians finally have a seat at the same table. If they're not going to solve the problem together, then who is?" ■

What You Need to Know

- Adoption of advanced decision support systems gives the healthcare industry a unique opportunity for collaboration in finding a way to bend the cost curve.
- Understanding the true cost of care and sharing this information across the organization is the most effective way to drive action.
- Healthcare providers need to proactively find the right clinical bundles for a known population and propose those products to the market rather than always reacting to what the market has to offer.
- With payment levels dropping, the industry's focus should be on helping providers survive so that they can remain in this competitive market.
- For maximum effectiveness, healthcare leaders must ensure data are accurate, comprehensive, accessible, and actionable.



Tushar Pandey



John Kontor, MD