

MDISEASE MANAGEMENT ADVISOR™

Five questions with ... Keith R. Dunleavy, MD



Editor's note: Keith R. Dunleavy, MD, is president, CEO, and corporate director at MedAssurant, Inc., a Bowie, MD-based provider of healthcare quality, care management, and verification systems.

Dunleavy is responsible for the overall execution of the company's business plan, expansion of strategic relationships, and the identification and realization of company product strategy and vision. Below, Dunleavy discusses patient medical data and what is needed to drive improvements in that area.

DMA: Describe your company and its offerings.

Dunleavy: Formed in 1998, employing approximately 1,600 personnel, and headquartered in Maryland, MedAssurant, Inc., is a medical informatics service provider focused on the importance of healthcare data and its ability to drive dramatic, objective improvements in clinical and quality outcomes, care management, and financial efficiencies throughout the healthcare community.

MedAssurant's solutions are empowered by proprietary healthcare data sets, abstraction, and analysis capabilities, and a national infrastructure of leading-edge technology and clinical personnel.

In partnership with many members of the healthcare community, MedAssurant provides local, regional, and nationwide health insurance plans, hospitals, pharmaceutical companies, regulatory bodies, government organizations, physician organizations, and their many coveted patients with powerful turnkey solutions to address matters of clinical outcomes

analysis, quality of care, cost improvement, risk adjustment, DM, utilization, and healthcare data verification.

DMA: How does improved patient medical data improve outcomes?

Dunleavy: Seemingly countless studies have shown that comprehensive, accurate, and timely healthcare data positively affect patient outcomes. Yosef Dlugacz, PhD, director of the Julienne and Abraham Krasnoff Center for Advanced Studies in Quality and a supervisor of the development of many best-practice quality standards applied by The Joint Commission (formerly JCAHO) to the entire healthcare industry, has documented well the role of access to quality medical data to assess, monitor, and improve care, verify application of evidence-based medicine, eliminate communication gaps, achieve consistent integration of care, promote collaboration among providers, optimize financial performance, and improve safety for individual patients and across systems.

Chaudry et al reviewed the evidence of the effect of the application of health information technology on healthcare quality and efficiency and, in so doing, demonstrated improved adherence to published guidelines, increased surveillance and monitoring, fewer medication errors, and decreased utilization of care.

As would be similarly expected, the work of several authors (such as Peter Smith and Darryl McDonald) has supported a link between poor electronic data quality and medical errors, as well as overall substandard care.

Further, in numerous studies, Bates et al have argued that quality information technology can improve individual patient safety, improve access to reference

information, enable smart patient monitoring to allow early recognition of trends indicating clinical decompensation, and identify and track the frequency of adverse events.

Beyond studies performed specifically regarding the effects of patient healthcare data, clinical practice experience reveals that the diagnosis and care management of a patient is highly dependent on the availability of data.

Knowledge about a patient's past medical history, active issues, medications, laboratory results, procedures, idiosyncratic presentations, and a landscape of additional data points greatly assists the care provider in its determination of ailment, intervention, and follow-up.

As a physician, knowing the fact that a patient who is about to be seen had a particular study performed one week earlier (a fact that many patients unfortunately have been shown to not always accurately recount) can enable the implementation or adjustment of a care plan in a more timely fashion as well as the avoidance of unnecessary redundancy of testing and follow-up.

Similarly, knowing the absence of a pertinent test (e.g., a sentinel monitoring blood level lab) can prove enormously beneficial in avoiding complications (e.g., liver toxicity secondary to specific medications) and achieving clinical goals (e.g., normalized blood sugar values as reflected in HgbA1c levels).

DMA: What is needed to drive those improvements?

Dunleavy: The successful application of healthcare data to improving quality outcomes and the benefits of utilization and financial efficiency requires several primary achievements. The following are a few that are believed to be vital.

Under the premise of medical data serving as a critical key to healthcare improvement, the first is a better understanding of the issues (or limitations) of traditional healthcare data concepts:

- ▶ Administrative data are not a complete reflection of the patient's whole disease and comorbidity history or status
- ▶ Identifying what is pertinent to know with respect to

specific healthcare initiatives is dramatically more important than achieving and providing mass data for data's sake

- ▶ The codified reflection of medical disease and comorbidity status continues to be an imperfect process, riddled with the complications of necessary translations to numerics that are designed to be an artistic interpretation and reflection of a patient's condition
- ▶ The ability to identify, target, and ultimately capture missing data, which is known to be pertinent (or at least predictably expected to be pertinent), is in fact critical
- ▶ Broader and more timely access solutions, feedback loops, and reiterative improvement processes must be applied to today's healthcare data sets

The second primary requirement becomes the ability to effectively apply healthcare data.

Although seemingly an obvious requirement, many initiatives do painfully little with valuable components of already available healthcare data. As such, specifically in the realm of DM, these issues include:

- ▶ Improving the success rate of being able to identify patients with disease or at risk for disease of relevance. Today, most DM programs use terribly simplistic patient identification algorithms, thus requiring patients to blatantly present with disease before the program will successfully identify the patient and intercede.
- ▶ Improving patient stratification. Currently, most DM programs are overly simplistic in stratification, succumbing to a severe, moderate, or mild approach.
- ▶ Improving engagement through greater granularity of insight. Today, most patients are approached with generic messages, nonpersonalized to their specific conditions or course, thus impeding buy-in by the patient and, therefore, the necessary behavioral change that is sought.
- ▶ Improving care management interventions through greater intelligence of process. Empowered by greater data granularity and timeliness, systems must draw more effective intervention conclusions—taking into

consideration a much broader array of available information, such as compliance indicators, patient-specific disease process trend, and historical complications to guide medications—instead of disease and immediate cost data alone.

With healthcare data more aptly understood and better used to drive empowering care improvement solutions, a third requirement—one of results and impact transparency—becomes relevant.

Results and impact transparency are critical to adoption of care management and healthcare improvement solutions.

Although the downside of this requirement falls into the “no good deed goes unpunished” category (as some health systems may quickly identify flaws in outside solutions, not realizing that the system may provide a dramatic improvement over the health system’s internal capabilities, which have gone unmeasured), it is a critical step to broader adoption.

DMA: How can DM companies and health plans address the rising role of patient-specific healthcare data?

Dunleavy: DM companies can address the rising role of patient-specific healthcare data with open arms.

The benefit that a greater utilization of patient-specific data can bring is felt by all parties within the healthcare system—the patient, the provider, the payer, and the solutions vendor. The critical matter will be the necessary evolution from the past landscape of inadequate utilization of limited-benefit administrative data to one of advanced analytics applied to what MedAssurant refers to as a “superset” of patient healthcare data.

DMA: What do you predict for the DM market during the next two or three years?

Dunleavy: We believe that a significant shake-up is under way in the DM marketplace.

Entrenched models built upon only limited patient-specific granularity, and technology utilization has been met with limited engagement and limited effect. As a result, there is a stirring backlash by the payer marketplace.

Further, many clients of DM services feel that this limited effect has also been shrouded in a limited transparency within programs and a general reluctance to provide more thorough and more frequent measurement and analysis.

Ultimately, DM is a high-touch process and should garner greater—not less—visibility into member status and trends. The intervention should be able to demonstrate clear ROI sooner. And the data gathered should be available to all parties within the healthcare system—improving availability to pertinent data, decreasing unnecessary utilization, and gaining benefits of error feedback and resolution.

We see this creating a market demand for more intelligent systems, driven by more granular analysis and intervention, and wrapped with a greater transparency of process and outcomes measurement. ■