

Why Unstructured Data is Still Important to Healthcare Providers

Save to myBoK

by Betty Dunagan, RHIA

We have arrived in the era of Big Data in healthcare, where digital transformation is a major driving factor. A variety of healthcare settings are currently using their electronic health record (EHR) systems to their full capacity, using databases that are just as large as their onsite assumptions, and organizations are working their way through the meaningful use metrics and electronic workflows check lists. These initiatives are reinventing the way things were done in the past as the primary storage for health records is transitioning from paper to electronic.

Discrete data bounds are now being utilized on a daily basis in these healthcare settings. For good reasons, clinicians would prefer the clean “click-on-the-drop-down” form of creating documentation rather than the completion of paper forms and disjointed information sharing. Clinicians see the organizational advantages in the electronic format, but also see innovative ways to use the data and information for secondary purposes such as analytics and population health. In the long run, these secondary uses will help with clinicians’ main goal: quality patient care.

With the new digital era, those in support of EHRs may argue:

- “The only way to survive in a value-based reimbursement environment is to leverage analytics and BPM tools in more aggressive ways.”
- “The best way to predict successful outcomes is to use evidence-based practices.”
- “The only way to manage population health is through the analysis and aggregation of discrete data.”
- “Evidence-based analysis needs to occur more often at the point of care, tailored to patient-specific variables.”

The above statements have proven to be accurate, especially in the HIM realm. However, the shift in today’s technology has lead to more innovative approaches to these paradigms. As new systems and technologies are built, we must learn to change our processes to keep up with these breakthroughs.

Data entry is continuing to burden providers with all documentation types. As noted in the second paragraph, the “clean” form of documenting does not always equate to the “quick” form of documenting. In a recent study featured in *Annals of Internal Medicine*, it was estimated that for every hour spent with the patient, providers spend two hours documenting patient care. All the potential uses of EHRs are still in development and are still being explored, but as we continue to grow in this electronic society the secondary uses of the EHR will become clearer.

While it’s true we need discrete data, it is also true that we are in possession of a wealth of advancement in natural language processing technology along with other extremely mature ways to manage and orchestrate the integration of the abundant amount of unstructured healthcare data. Unstructured data can be hard to manage, but with proper governance structures in place, these processes can become routine in an organization. The data will become information which becomes knowledge and intelligence and can ultimately become wisdom if managed accordingly.

Physicians recognize the value of accessing all data—including unstructured data—in a timely manner. This is crucial to delivering quality care to patients. Ask any physician, “what is most important and when?” and you will most likely hear, “access to the right information at the right time in the patient care process.”

It is crucial to have this timely access to information in order to execute high quality patient-centered care. Aside from the interoperability aspect, the ability to get to the information you need from your systems for direct patient care ranks above the broader strategy of compiling large masses of discrete data.

To keep up with the reality of today's high volumes of data and information, we must begin to rely on technologies that help us extract value from unstructured data, combine it with discrete data and formulate analytics sources from the resulting unified body of data.

“Just because you CAN automate something doesn't always mean that you SHOULD.” We have the solutions needed to move away from paper. We also have the technology to add “structure” around our unstructured data. In the next phase of the clinical documentation evolution, providers must continue to utilize structured and unstructured data in strategic ways to advance patient care outcomes.

Betty Dunagan is industry manager at Health Record Solutions.

Original source:

Dunagan, Betty. "Why Unstructured Data is Still Important to Healthcare Providers" ([Journal of AHIMA website](#)), January 19, 2017.

Driving the Power of Knowledge

Copyright 2022 by The American Health Information Management Association. All Rights Reserved.