Case Study: Advanced text mining to improve quality measurement reporting

Save hundreds of hours extracting data for quality measurements.

The collection and use of data to drive healthcare improvements has accelerated in the past few years, and along with it the need for quality measurements. Compiling measurements for programs such as Medicare Shared Savings Program (MSSP) and Hospital Acquired Conditions (HAC) is very labor intensive, requiring detailed review of clinical charts by experienced staff.

The Challenge
In order to qualify for Medicare reimbursements, health systems and ACOs provide data for a variety of patient experience, safety, preventive health and at-risk measurements for a randomly selected group of over 600 patients. Each year, clinicians spend significant time carefully sorting through patient information in order meet these criteria. In the case of measurement ACO-33, abstractors typically need 45 minutes or more on average per patient in order to extract the LVEF value. Left Ventricle Ejection Fraction (LVEF) refers to the fraction or percentage of blood that is pumped out by the left ventricles of the heart. This measurement provides an assessment of cardiovascular limitations and indicators for health failure.

The Solution
A local partner chose to pilot nDepth™ to more efficiently report quality measures. nDepth extracted hard-to-find data from unstructured documents quickly and accurately. This automated extraction improved quality workflow allowing valuable resources to focus on validation instead of manual chart abstraction. Using nDepth, we have demonstrated the ability to extract the LVEF values per CMS-MSSP measure ACO-33 at the scale of an entire health system in minutes.

nDepth™
Unlock the value of unstructured data for quality, research and clinical improvement. Extract meaningful information from hard-to-find patient characteristics such as social behaviors, symptoms and family history. Explore deep below the surface of claims and EHR data to bring rich clinical content to your fingertips.