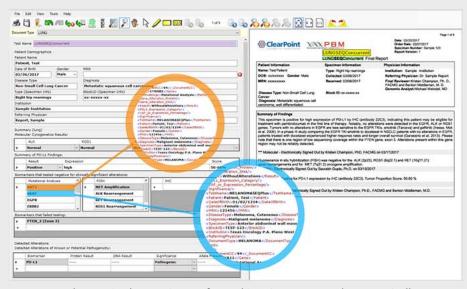
Automation For Gene Alteration Research Data & Precision Medicine

Background

A major cancer organization was receiving Medfusion SEQ diagnostic reports. These test results provide the organization with actionable research information regarding genetic biomarkers for cancer patients with solid tumors. It was important that the results be ingested accurately. By filing each gene alteration discretely, they are able to query on specific genetic aberrations quickly and evaluate treatment alternatives at a genetic level.

Challenges

A desire to gather data in a consistent format with each gene expression having a unique record in their proprietary database. With thousands of historical documents, each containing numerous results of gene expressions, the volume quickly overwhelmed the data entry staff. Since each expression has its own record, it also meant that a patient's demographic and diagnosis information needed to be entered repeatedly, opening the door for typographical errors.



Each genetic element is transformed into its own record automatically.



Solution

The HealthyData Data Entry Panel (DEP) for the organization captures data, including information like demographics, MRN, tumor type, medical facility, gene alterations, and DNA and protein markers. This information is translated into a format that turns a single report into individual records for each gene result. They now have vast query capabilities on their research data, allowing them to see how and why certain genetic markers affect others, and study treatment efficacy down to the specific gene level.

HealthyData is capturing more than 90% of the test data accurately, saving staff time and reducing database errors. Precision medicine requires precise data.