When attempting to identify a specific epilepsy syndrome, physicians are often unable to make or agree upon a diagnosis. Even when training and resources are available, expert epileptologists often find it challenging to identify seizure types and to distinguish between specific epilepsy syndromes. Information relevant to the diagnosis is present in narrative form in the medical record across several visits for an individual patient, which makes it challenging for the physician to analyze in synthesis. This talk explores, as a baseline, text classification methods that attempt to correlate narrative text features for the diagnosis of West syndrome (Infantile Spasms). Our ultimate goal is to create a system that will assist physicians in the diagnosis of epilepsy by combining automatic analysis of a patient’s EMR in contrast to the conjunction of many more relevant EMRs of similar patients.