Abstract

Our project’s goal is to develop a healthcare metrics performance dashboard. This software would provide doctors, nurses, and other medical staff the ability to easily view up-to-date statistics on their current office environment. In turn, the office staff can provide patients the best possible service when they are visiting the doctor’s office. This Dashboard is implemented on the front end with HTML and the AngularJS framework, utilizing visually appealing widgets to display current data and metrics. These widgets pull their data from Aprima’s pre-existing database using a PHP and SQL back end.

Results and Data

The Dashboard currently displays 3 widgets which contain live information fed from a database. The first of these, shown below on the left, displays the average wait time for patients based on the specific provider in a gauge format. The bar graph to the right of the gauge shows office financials going back a week. Within this graph, you can also choose to view payments, credit, or distributions.

Impact

The Metrics dashboard will have a positive impact on all the parties involved. First, starting with the doctors who will be able to see several metrics about their practice which will help them better manage it. The medical staff will also be able to see these metrics which they can provide to patients, making their jobs a little easier. The patients also benefit from these metrics, mainly the waiting time. With this dashboard, the metrics are updated in real time so when a new patient enters the office, they will know the average wait time based on all of the patients before them. Our sponsor will also benefit as this is a prototype they have wanted to see implemented. We, the group members, have also benefited as we were all exposed to new languages that have expanded our skillset of web development.

Summary

Using AngularJS, HTML, PHP, and SQL, we were able to create a metrics dashboard for Aprima to incorporate into their preexisting medical software. The dashboard consists of Wijmo widgets and works as intended. These widgets consist of graphing patient waiting room time data, keeping track of weekly office finances, and allowing medical staff a quick view of the daily patient status. We have also made it where it is simple to add any additional widgets to the metrics dashboard. The completed metrics dashboard will contribute to providing better patient care and will work to streamline office support.