



# SMART ON FHIR CASE STUDY OF TECHNOSOFT SOLUTIONS



## PROJECT OVERVIEW

MeHealth is a behavioral health Information system focused on providing evidence based tool for improving the quality of care for ADHD patients. MeHealth software is used by physicians, parents, school teachers & other stakeholders in the ADHD patient’s continuum of care to document their findings about patient’s progress. MeHeath in turn consolidates data from all these sources & presents to physician’s reports that help in deciding medication and other treatment options for the patients. This consolidated report needed to be shown within the EHR of hospitals. A SMART on FHIR app was developed to fulfill this need.



**PROJECT NAME**  
MeHealth SMART on FHIR APP



**CLIENT NAME**  
MeHealth



**DEPLOYED AT**  
Large Children’s Hospital on the East Coast

## PROJECT HIGHLIGHTS

- 01 A subset of existing patient report is developed into a SMART on FHIR App. ON TIME
- 02 A Provider facing, EHR launchable app is developed without a second login to meHealth. ON TIME
- 03 Epic and Cerner Integration. ON TIME



A SMART on FHIR Java Script app was developed to show a subset of the existing consolidated report. Most of the backend .Net code was utilized to develop the report and evolving medications list. A chain of trust solution was created to authenticate user within meHealth utilizing the authenticated token from Epic (EHR) and a FHIR server URL. The FHIR server URLs were white listed to ensure the chain of trust. The token was first utilized to get user context from the FHIR server URL to a: ensure token's validity

and b: get user context for authentication in meHealth. After the User authentication, patient context was used to see if a patient was found within MeHealth using a primary and secondary matching criteria for the mapped facility. If no patient was found then a new patient record was created. If a patient is found within MeHealth system, then the consolidated report for that patient was generated and passed on to the SMART on FHIR app. Different patient assessments were also integrated into the SMART on FHIR app. This SMART on FHIR app has been integrated into Epic and Cerner. Allscripts integration testing underway. All vanilla FHIR calls are used and no EHR specific APIs are used to keep one SMART on FHIR.



## REQUIREMENTS

The existing web app was needed to be visible within each EHR starting with Epic. The physician should be able to see the app in a web frame in the EHR by clicking on a tab in the Patient's Record. Upon accessing the tab that Patient's identifier information and current medication needs to be passed to the meHealth web server, which will either return a "No Patient Found" message and create the patient within the MeHealth database, or show a customized report in a web frame. EHR users need not enter user credentials into the MeHealth app.



## TECHNOLOGY USED

ASP Web Forms, Entity Framework, ADO.Net, jQuery, Java Script, VB.Net, C#, Web Services, ASP.net Forms Authentication, OAuth 2.0

### ABOUT TECHNOSOFT:

We have extensive exposure and experience in custom healthcare and medical software development and Healthcare Integration. Our healthcare software offerings include Electronic medical records, HMIS, EHR, FHIR, SMART on FHIR apps, Medical billing and coding, medical practice management.

Engage with our business and technology experts for strategic solutions that address the full scope of healthcare issues today, from compliance through integrated health management.



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