

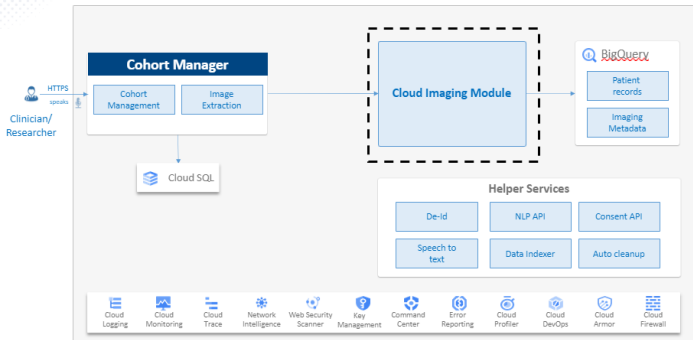
Case Study: Imaging Cohort Builder

Client Requirements

Client is a leading healthcare provider services across US with strong presence in provider network. Client is also involved in multiple research projects and has a solution that helps in identifying patient cohorts which could be used for research.

Existing application has lot of limitation for cohort building and data extraction, in order to address it client wanted to develop an easy to use, self service tool to identify cohorts and extract imaging studies from their cloud platform for research and/or business development.

CitiusTech was selected for this engagement for its deep understanding on imaging domain and expertise around the DICOM and FHIR.



Solution Schematic

CitiusTech Services:

CitiusTech with domain expertise in medical imaging, cloud partnership and strong technology footprint was asked to build an application (UI concept) which will have the following capabilities:

- Provide a smart search functionality so that the user can search for cohort based on keywords/terms
- Integrate the cloud cohort Builder with OHIF viewer to collectively view all the Patient/Study data
- Integrate with GCP data repositories on cloud (DICOM/FHIR stores) by leveraging GCP Health API and cloud infra services

Value Delivered:

- CitiusTech developed a completely cloud native Imaging Cohort tool to allow metadata-based radiology images search
- Integrated NLP capabilities to search cohorts with speech commands
- The solution reduces the manual cohort data extraction for identified cohort
- Solution is scalable addressing the multi centric approach with IRB validation, viewer integration and auditability
- As a result, the initiative led to reduction of effort which led to cost savings and addressed the needs & pain points effectively