Hackathon

Automation of LLRR

Problem Statement

Manual assessment of Local Lab Reference Ranges [LLRR] submitted by CRA and the procedures that follow requires great precision, may require a lot of time and can be arduous. Build automated data analysis and reporting tools for LLRR.

Problem Description

The LLRR Collecting Sheet (LLRR CS) submitted by the Clinical Research Associate (CRA) is often reviewed or quality controlled (QC) manually. The Local lab reference ranges (LLRR) of each site from the LLRR CS are then manually entered into the Rave database (web-based application). The LLRR input is performed while adhering to both general and study-specific norms. Similar work must be done when running the database UAT by setting up a couple of laboratories and adding the test LLRR to the UAT environment. Human inspection of clinical database input and quality control takes time, is arduous and is monotonous.

Expected Output

Automated review or QC of LLRR CS should be done once the CRA places the LLRR CS in the study-specific SPOL or web app to facilitate the collection of LLRR. (Connect with the Referral database to verify the existence of the lab for the usage of existing ranges.)
LLRR Entry Bot configuration support containing general and study-specific conventions to be followed while performing the data entry.
LLRR Entry Bot should support both UAT and PROD databases in Rave.
UAT: The bot should consume the configuration file and perform the entry in the database using the provided URL. A confirmation email should be triggered after the activity is completed.
Bot should perform the QC of submitted LLRR CS once it is available on study SPOL and send regular QC reports.
Standardisation of QC processes and automation of SMART listings for QC processes
A common sharing point site with all links, SOPs, and written instructions for a new associate. Scalable and accessible to other vendors for outsourced studies.