Visualization #2

Ingestion of ▮▮ and ▮▮ data
Side Logic
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SMEs ▮▮
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Things to Keep in Mind
- US v. United States
- UK v. United Kingdom
- Leading Zeros in Study Numbers

Questions for Thanh
- What format does ▮▮ need the query results?
- Are we able to create the override flag in ▮▮? Need to be able to go from Custom back to ingestion. Flag needs to be exported to ▮▮. Per Thanh – study/country combination would need to be deleted from ▮▮ and then it would be ingested the following day. Manual demand will be removed when study/country is deleted. ~~Thanh needs check with whether if one of the 4 fields is custom are all 4 fields considered custom. Or is each field that is modified separately identified is Custom—at the field level?~~ Business also needs to have first baseline in ▮▮ overwrite any Custom values in PPM. PPM could have another Source field that when first update from Default would be "Manual", and those values would be overwritten by ingestion. "Custom" would be a status when there is an update to a value where Source is NOT "Default" or "Manual".
- Each field has a source field. With this integration we will go back to a single source for the entire study/country record.

Updating or deleting Study/Country combinations

Starting point is list of Studies in ▮▮ where Study Budget Status is NOT Closed or Cancelled

Go to next study

Does study exist in ingestion file? — No / Yes

Loop through country records within the study

Is Manual Override checked for this study/country? — Yes

Does study/country exist in ingestion file? — No → Delete study/country record in ▮▮ / Yes → Update ▮▮ record with all ingestion file values

Adding New Study/Country combinations

Starting point is study/country combinations in ingestion file that do not exist in ▮▮

Loop through records and add study/country combinations to ▮▮

Expectation is that ▮▮ and ▮▮ values are up to date. However, need an override in ▮▮ if ingested values are incorrect or there are other reasons we want to override the ingested value.

For instance, if the source is Custom for a particular field we don't want to overwrite via the ingestion. But also need a methodology to go from Custom back to ingestion.

Study/Country level fields to be ingested:
- # Subjects
- # Sites
- FSE
- FSA
- Source
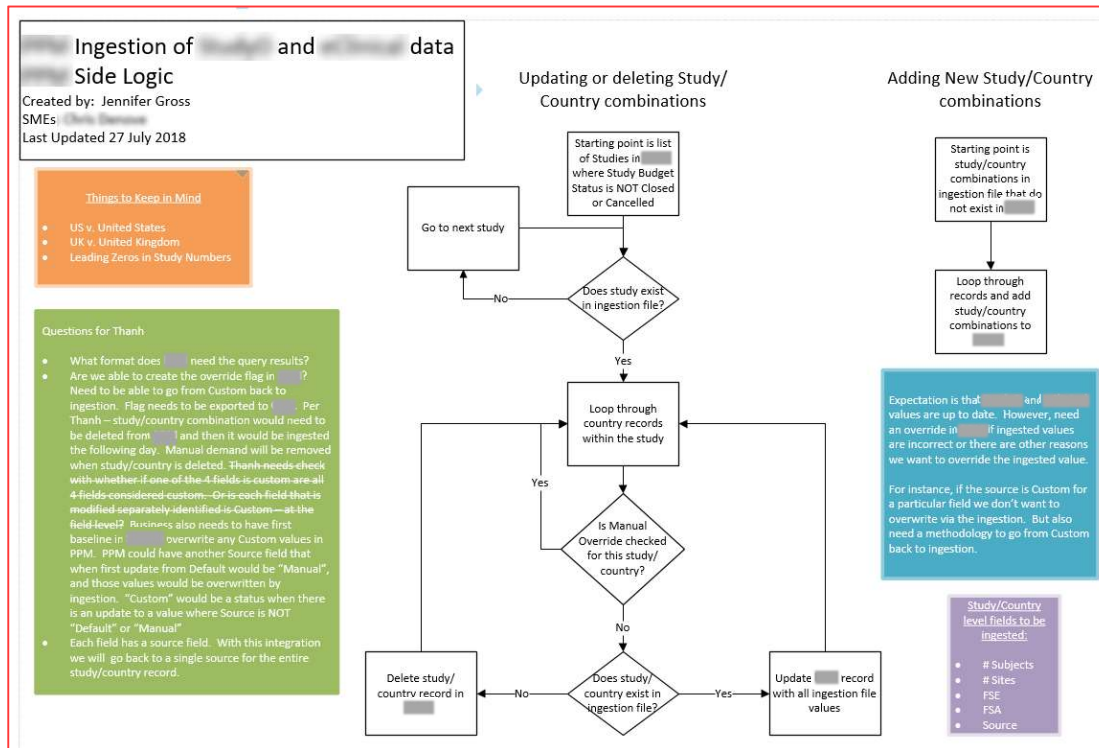
Business Problem: Resource Forecasting for clinical studies within a country has dependencies on the number of sites and subjects in that country. Prior to a particular milestone Resource Forecasting wants to use the number of sites and subjects that are *planned* for a country. Once that milestone has passed, Resource Forecasting wants to use the *actual* number of sites and subjects enrolled within the country.

Resource Forecasting, Study *Planning* and *Actual* Study Data are managed by three different systems each with their own database. Risk has been encountered when users are entering data to manually align the systems.

My Role: My leadership team had submitted a requirement to the development team for an automated ingestion of the data from the *Planning* and *Actual* systems. At first my role was to UAT the functionality. Initial UAT of the query logic to identify the data that needed to be ingested failed. I was then tasked with identifying SMEs in the source systems' data architecture to determine the proper logic for extracting the necessary data from the source systems. Though operationally stored separately, data from all three systems is ported daily to a single operational data store.

My Process: I reviewed query logic against each of the *Planning* and *Actual* systems as well as ERDs and data dictionaries. Through working meetings where we reviewed my questions and objectives, I worked with various SMEs to determine what logic should be used to identify the required data. The SQL query was developed by me.

As part of that process, I built out several process flows, including Current State, Future State, and the Ingestion Logic to be implemented in the Resource Forecasting system (shown here). My goal was to better equip the development team so that they could be successful in developing the ingestion.