Clinical Informatics: Bridging the Gap between Clinicians and Data Insights

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Background

The need for clinicians to be connected to quick and accurate patient data is rapidly increasing. Jefferson Health has implemented the role of Clinical Informaticists (CI) within the Analytics department to help bridge the gap between end users and their data. The CIs have developed and implemented a data request process that involves vetting and requirements gathering, data discovery, demand management, and development, delivery, and education of the data.

Responsibilities of Clinical Informaticists

- Responsible for creating process and procedures
- Vetting data needs with requestors
- Translate operational need to technical specifications and allocate tasks to developers
- Coordinate Reporting Demand Management
- Education of end users on reporting tools and workflows
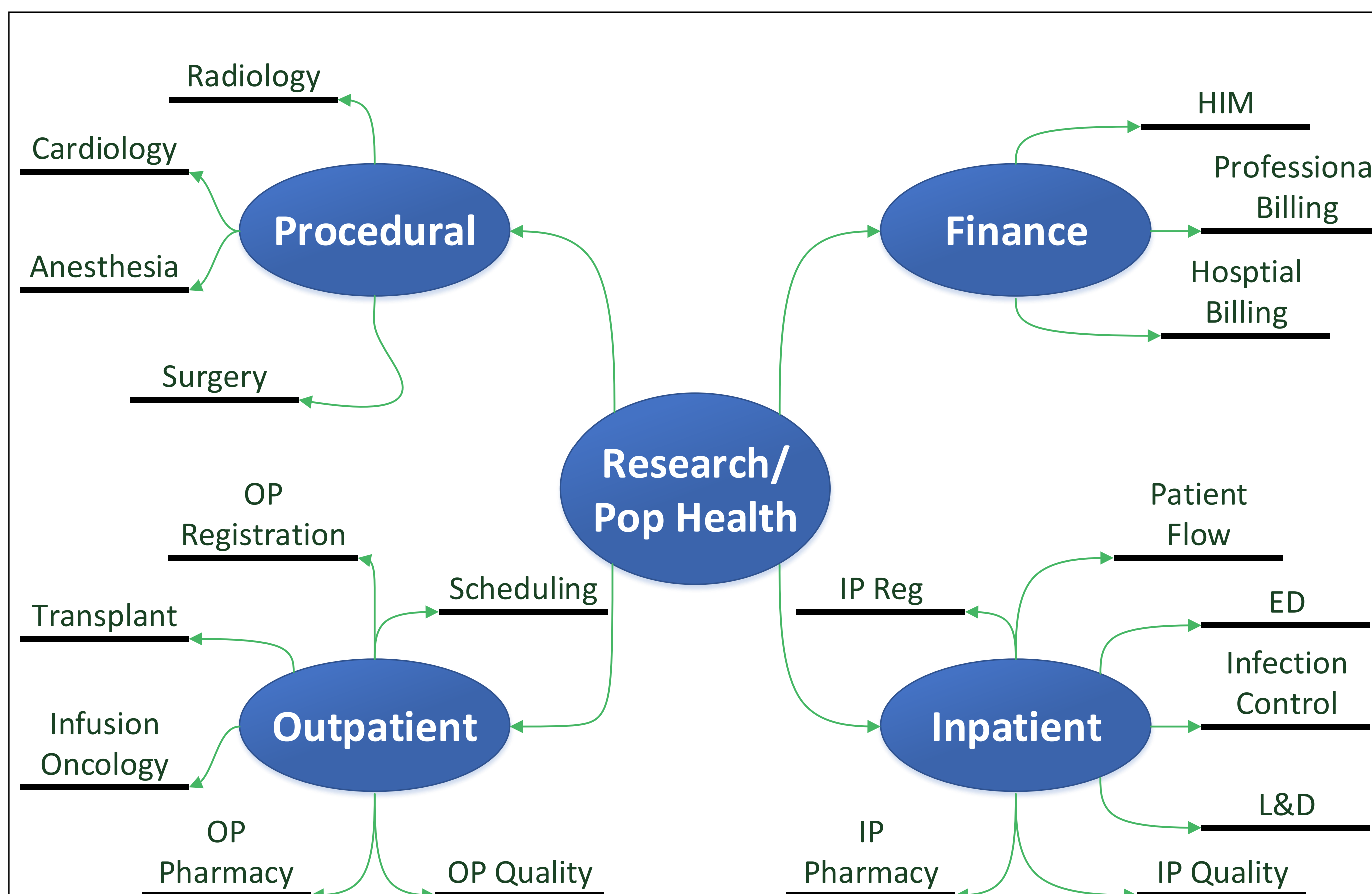
Reporting Demand Management

Figure 1: Demand Management Pillars and Subcommittees. The success of demand management lies in the alignment between the CI and Clinical Leadership. The information the CI has gained from the clinician during the vetting process is presented to the sub-committees depicted here. This gives leadership a clear presentation of the request which allows appropriate prioritization and transparency. It also insures the team is working on the organization's highest priority to ensure utilization of the data to drive change.
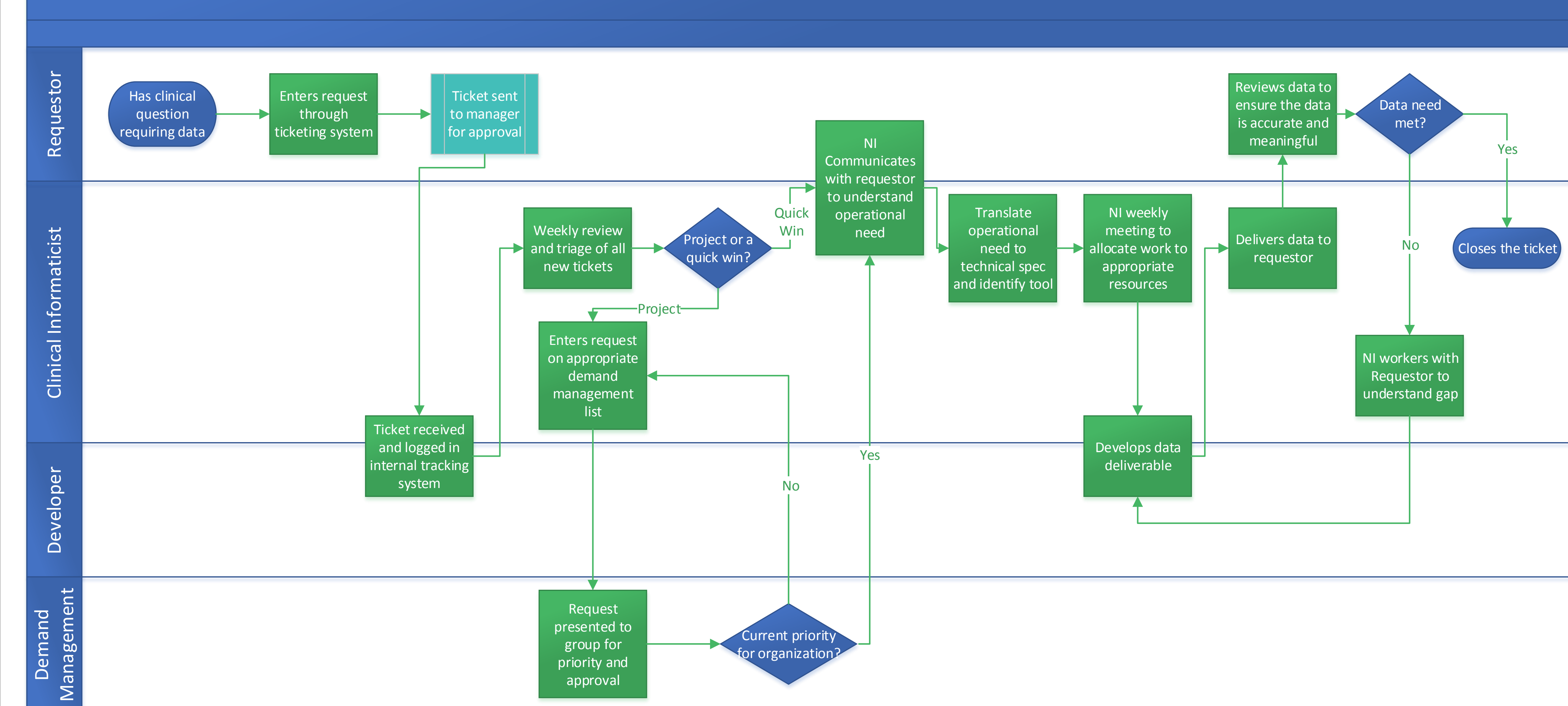
Process and Procedures

Data Request Process

Figure 2. Data Request Process. CIs developed standardized process and developed the depicted workflow. Streamlining requests to one ticketing system allowed the CIs to triage appropriately. Requests are reviewed weekly then assigned to the CI responsible for that clinical area. The appropriate CI resource is then able to reach out to the requestors to discuss the specifications and required data elements for the request. From there, requests will go to Demand Management for prioritization and then development.
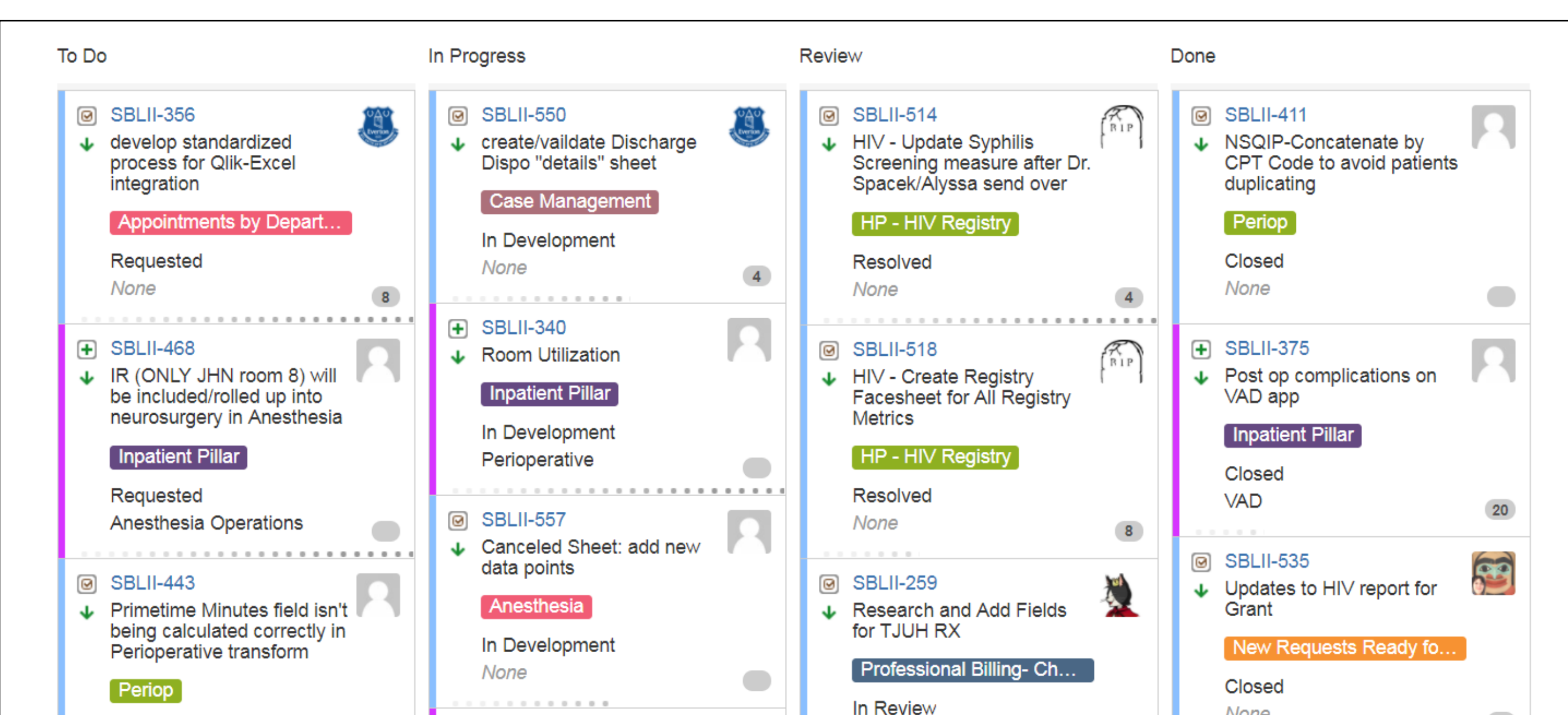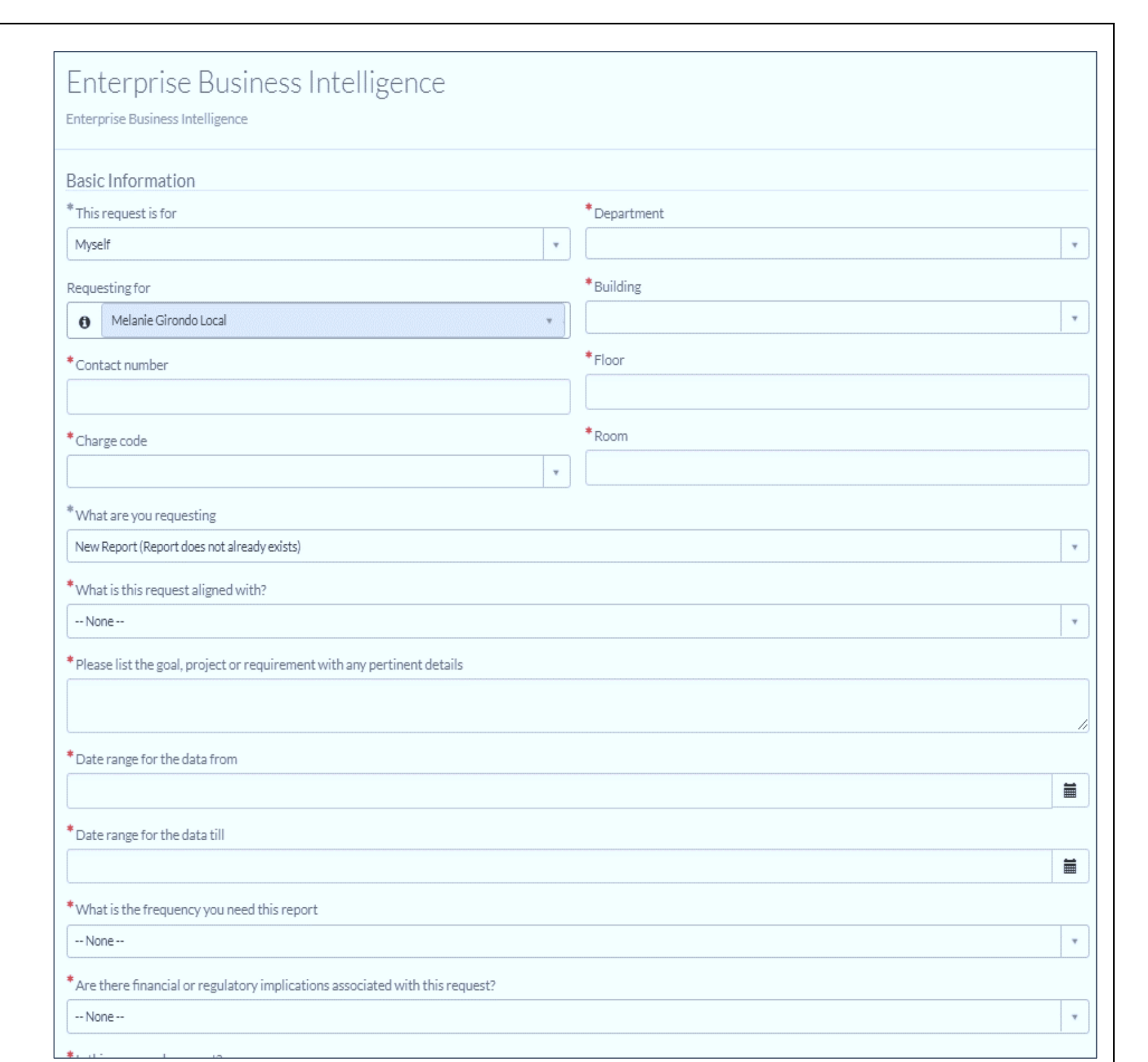
Technical Specifications and Task Allocation

Figure 3: Task Allocation. Once prioritized, the CI translates the clinical needs into technical requirements. CIs then assign work to each developer. This is tracked in our internal system pictured here.

Education

- Create tip sheets for specific analytic applications on how to use the tool and explore data
- Provide reporting workshops to allow for at the elbow support and education on the reporting tools and insights the data provides
- Aligned with clinicians to attend regularly scheduled meetings to help educate staff and avoid needing time away from patient care

Vetting Requests

Figure 4: Vetting Requests. During vetting, it is necessary to ask the appropriate question starting with the form shown here. Requests can start broad and clinicians do not always know the various fields for documenting the same element. Understanding the question the clinician is seeking to answer allows the CI to ensure the appropriate elements and patient population are included in the output.

Conclusion

The CIs have assisted the organization in ranking 5th in reporting usage across all health systems utilizing Epic as their EMR with over 4000,000 report runs in the last six months and over 50% of the Jefferson community accessing data. Using the reporting tools of our Analytics team, Jefferson Health is able to drive insight, improve patient safety, and provide evidence to base clinical change.