CTO Financial Dashboard We have developed a database that uses data from our CTRM and university accounting software to display study metrics as well as provide an analysis of time and effort per trial.

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## 1. Background

As clinical trials become more complicated, including genetic-based treatments, we found the effort needed to manage these trials was more than budgeted. Our negotiated reimbursements were not covering the actual visit costs.

In the past, we analyzed data for each Clinical Trial Research Group (CTRG). This involved manually preparing a yearly financial dashboard of combined data from spreadsheets and databases. Other key performance indicators such as effort expended by staff role/position, study type, CTRG, and physician also involved vast amounts of time for manual gathering of the data.

## 2. Goals

Our goal was to find a more effective way of determining the actual effort expended for every clinical trial visit, as well as the key performance indicators mentioned above.

Metrics needed to evaluate effort by trial:

- Clinical Trial Research Group (Disease) (CTRG)
- Study type
- Goals/actual accrual
- Visit count
- Coordinator/Data Manager/Specimen processors effort
- Effort charged or not charged by study
- Income statement from financial software

This data has been available from our clinical trials management software (CTMS), as well as financial data from our organization's financial software. We wanted to evaluate these metrics on three levels: individual trials, CTRG, and the Clinical Trials Office as a whole.

## 3. Solutions and Methods

Our in-house programmers designed a financial dashboard database to consolidate all the data mentioned above. It also performs calculations to provide us with the actual effort expended by trial, staff role, study type, physician, and per completed visit.

## 4. Outcomes and Future Directions



We prepared an executive summary that outlined all parameters required for the design of the database, including a detailed analysis of all fields and calculations. This proved to be very valuable.

The financial and patient data is reported monthly, but effort is reported quarterly. We decided to display data quarterly, yearly, or total year to date. We load all data at the same time point, allowing users to see metrics up to the end of the last quarter.

With the data generated from the database, we identified areas where we need to negotiate increased hours of effort in our study budgets. This included trends in some CTRGs where negotiated budgets were consistently one-third of the actual effort expended. We plan to add a budget-to-actual comparison to the database.

The database still relies on manual processes, but now data can be prepared faster. The database also eliminates the need to repeatedly calculate the same totals.

We discovered CTRG managers also used the data we collected to prepare reports for CTRG meetings with physician leaders and staff. With this database, CTRG managers no longer need to prepare these reports manually. We plan to make this database available to all staff and clinical trials physicians, with different views based on the end user role.