

Leveraging Workflow & Analytics Technology Solutions to Enable Data-Driven Decisions for Startup Pipeline Management

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1. Background

With a large and growing portfolio of 150+ trials entering the startup pipeline across 16 research groups, and a mix of central and decentral models for study startup, our center needed clear and easily digestible pipeline information at all times, with opportunity to proactively identify studies that were held up in various stages of the pipeline and engage with disease groups on support needed to move the studies along to a timely startup.

2. Goals

Leverage an optimal mix of workflow and data visualization solutions to appropriately track and visually present pipeline information to enable project management of individual studies, proactive pipeline management of disease group portfolios and analytics to inform staffing and growth strategies for the portfolio.

3. Solutions and Methods

Solutions

Workflow:

In addition to our ***OnCore clinical trial management system (CTMS)***, we've built a suite of workflow tools to enable pipeline tracking.

- ***Smart Sheet*** (a leading project management platform) is being leveraged to provide startup project management for financial, regulatory and clinic implementation workstreams – utilizing standard templates for each centrally managed study, data points are gathered from Intake to Activation in simple worksheets (with powerful behind-the-scenes automation) so the data can be aggregated into dashboards.
- ***Zendesk***, a ticketing system is utilized to enable structured communication and date stamping of key activities so the turnaround times for every step of the workflow can be measured.

Data Pipeline:

- Data from CTMS and Workflow solutions flow to Tableau for dashboarding capabilities to allow for rapid development/iteration of dashboards that reflect near-time data.

Trial Dashboards:

- Study Level Gantt Views
- End-to-end startup dashboard with drill downs
- Process specific dashboards with drill downs
- Outlier dashboards

All dashboards include a variety of drill-down capabilities and are visually presented to align with Tableau best practices. For broad visibility dashboard access is provided to disease groups so information is available to support daily work and long-range planning.

Methods

- Dedicated workflow and analytics team with cross functional skills in CTMS, Tableau, data engineering SQL, business analysis, clinical trials data & workflow, Smart Sheet and Zendesk solutions
- Structured processes for data definitions and governance facilitated by analytics team.
- Bi-weekly data reviews with operational leaders to discuss process bottlenecks and identify solutions.
- Active pipeline review of studies that are aging in pipeline and initiation of communications with disease teams, principal investigator (PI) and sponsor to expedite processes.
- Quarterly data reviews with disease groups to discuss portfolio status, staffing and growth strategies.
- Active enhancement and new dashboard development cycles allow for ability to keep up with workflow changes and also proactively utilize data to drive workflow change.

4. Outcomes

- Several process improvement initiatives have been rolled out based on active review of trial startup data.
- Ability to plan staffing and growth is enabled by visibility to portfolio along various dimensions.
- Elegant workflow solutions have improved team productivity and job satisfaction.
- Active engagement, deeper conversations around challenges and enriched relationships between study teams and central offices supporting study startup.

5. Lessons Learned and Future Directions

- Essential to build a dedicated workflow and analytics team with cross functional skills and ability to understand business analysis, data, technology, and clinical trial workflows.
- Crucial to establish and sustain a disciplined governance process for data definitions and dashboard presentation.
- Continue to actively deliver enhancements, new dashboards and thoughtful workflow solutions using light weight design processes (that do not take staff through a heavy cycle of meeting time) and simple/effective user experiences.
- Stay up-to-speed on new technologies and integrate solutions into clinical trial startup landscape.