Week 3 - Adherence Tracking: Weekly Report

Project: Clinical Trial Patient Recruitment & Adherence Monitoring
Date: Week 3 Deliverable
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1.Executive Summary

This week, the project transitioned from recruitment and site-level performance to a granular analysis of patient adherence. The primary
deliverable is the •Week 3 - Adherence Tracking" dashboard, which provides a comprehensive overview of patient compliance with the trial
protocol. Key findings from the initial analysis reveal a critical need for intervention, with an Overall Adherence Score of 50.9% and a significant majority of patients flagged as "At-Risk.
• This report details the new dashboard's functionalities and the crucial insights it has already begun to provide.

2. Data Set Acquisition and Preparation

For Week 3, the focus was on integrating adherence data, which included records of completed visits and medication schedules for each patient.
This involved:
• Data Integration: Merging adherence logs with the existing patient and enrollment data.
• DAX Measures for New calculations were created to determine patient adherence percentages, dropout risk flags, and overall adherence scores. These measures form the analytical backbone of the new dashboard.
• Data Validation: The integrated data was cross-referenced with enrollment records to ensure accuracy and consistency across the entire dataset.

3. Week 3 - Adherence Tracking Dashboard

The new dashboard is designed to provide at-a-glance insights into patient adherence and facilitate deeper analysis through interactive filtering.
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The dashboard highlights several critical metrics:
• Total Completed Visits: 1778
• Overall Adherence Score: 50.9%
• Taken Count: 916
3.2. Visualization and Insights
• Patient Adherence% by Month: This line chart shows a fluctuating adherence rate throughout the year, with a noticeable dip in the later months. This trend requires further investigation to understand the underlying causes.
• Dropout Risk Summary: A pie chart that presents a stark picture of the current situation:
    o At-Risk (Adherence < 70%): 563 patients (70%)
Low Risk: 237 patients (30%)
    o This indicates that a large portion of the patient cohort is not meeting the adherence threshold, posing a significant risk to the trial's data integrity and outcomes.

• Completed Visit Distribution: A bar chart that displays the number of completed visits by patient, allowing for easy identification of individuals with low engagement.
• Patient Details Table: A detailed table provides a patient-by-patient breakdown of medication, completed visits, adherence percentage, and their dropout risk flag. This allows for targeted follow-up with specific individuals.
3.3. Interactivity
The dashboard includes several slicers for dynamic data exploration:
• Enrollment Site
• Status
• Name

These filters enable trial managers to isolate and analyze data for specific subgroups of patients.

4. Key Observations and Next Actions

• Low is a Critical Issue: The Overall Adherence Score of 50.9% is a major concern. Immediate action is required to understand the reasons for non-adherence and implement strategies to improve it.
• High Percentage of "At-Risk" Patients: With 70% of patients flagged as "At-Risk," there is a high probability of increased dropout rates and compromised data quality.
• Next Actions (Hand-off to Week 4):
    • Root Cause Analysis: Conduct a deep dive into the data to identify the primary drivers of low adherence. This will involve analyzing the "At- Risk" patient cohort to find common characteristics or experiences.
    • Proactive Intervention Plan: Develop a targeted intervention strategy for the "At-Risk" group. This may include additional patient support, reminders, or site-level interventions.
    • Predictive Modeling: Begin exploring the development of a predictive model to identify patients who are likely to become non-adherent in the future.

5. Conclusion

The Week 3 dashboard has successfully illuminated a critical challenge in the clinical trial: patient adherence. The insights gained this week will be instrumental in shaping the focus of Week 4 and beyond. The ability to identify and monitor "At-Risk" patients provides an opportunity for proactive management to improve patient retention and ensure the successful completion of the trial.