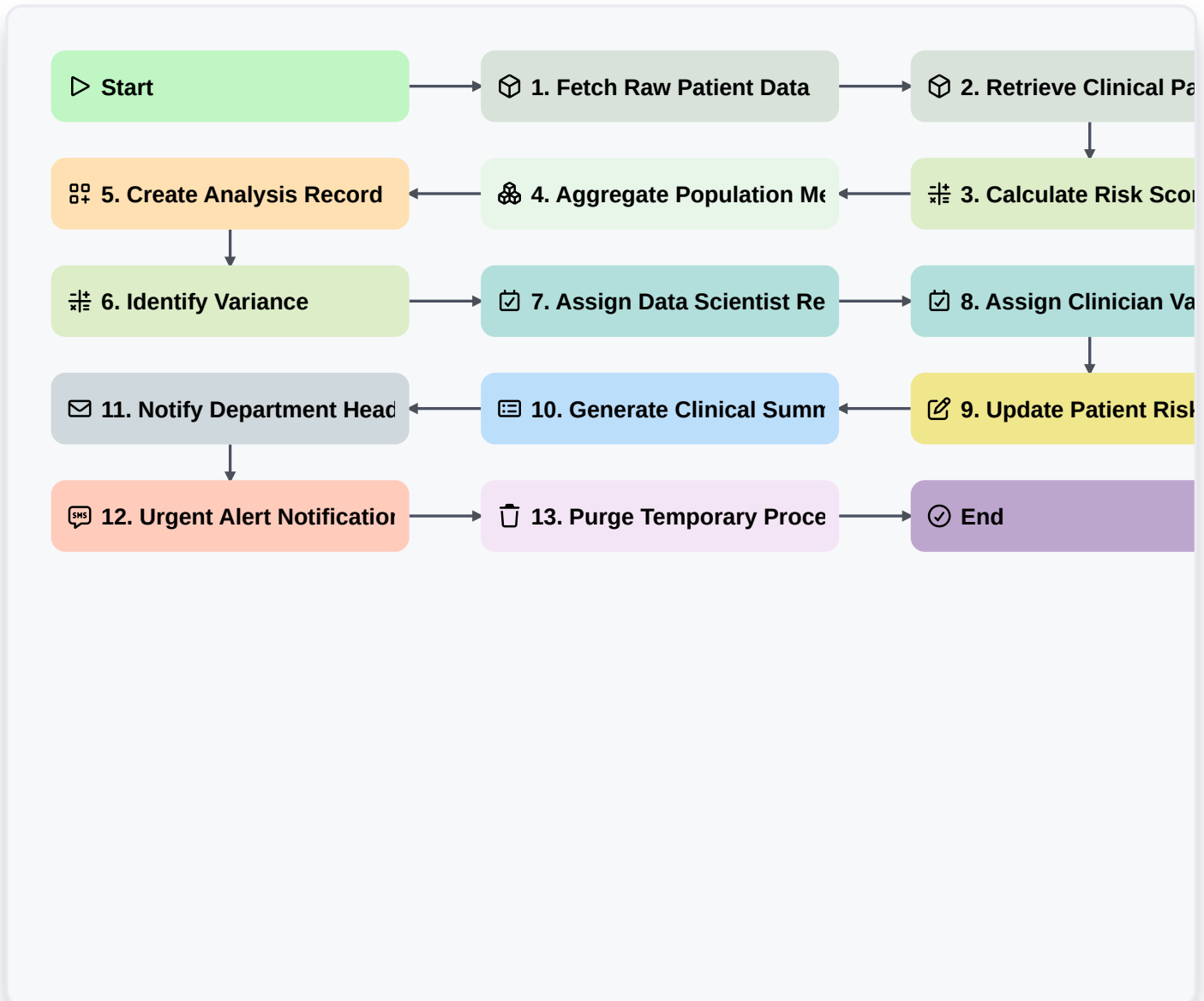


Healthcare Data Analytics And Reporting Process



▷ Start

Start of the Workflow/Process.

1. Fetch Raw Patient Data

Retrieve historical patient records and clinical data entries from the Healthcare Data Model.

2. Retrieve Clinical Parameters

Fetch specific lab results and vital signs required for the current analysis period.

3. Calculate Risk Score

Execute a clinical formula (e.g., Charlson Comorbidity Index) using retrieved patient variables.

4. Aggregate Population Metrics

Calculate the average, min, and max of specific biomarkers across the selected patient cohort.

5. Create Analysis Record

Generate a new entry in the 'Analytics Reports' data model containing the processed results.



6. Identify Variance

Calculate the difference between the current clinical results and the baseline historical averages.

7. Assign Data Scientist Review

Create a task for the Data Science team to validate the accuracy of the generated risk scores.

8. Assign Clinician Validation

Create a task for the Medical Director to review findings for clinical significance.

9. Update Patient Risk Status

Update the 'Risk Level' field in the Patient Data Model based on the new calculation results.

10. Generate Clinical Summary Report

Generate a structured PDF/Dashboard report summarizing the cohort analysis and findings.

11. Notify Department Heads

Send an email containing the summary of findings to the heads of the relevant clinical departments.

12. Urgent Alert Notification

Send an SMS alert to the on-call clinician if the calculation identifies a critical outlier/danger zone.

13. Purge Temporary Processing Data

Delete temporary intermediate calculation entries to maintain data model cleanliness.

End

End of the Workflow/Process.