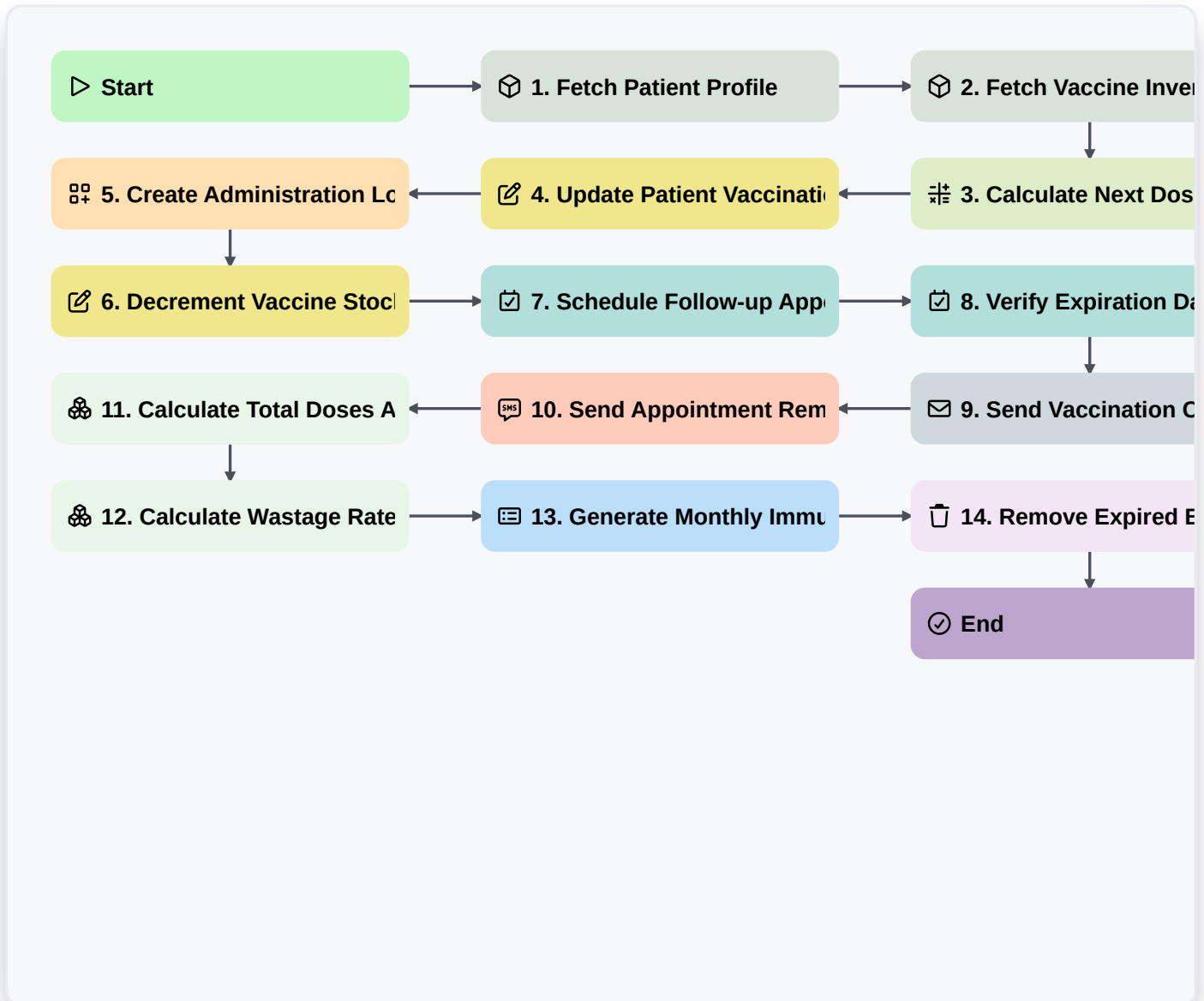


Immunization Tracking And Record Management



▶ Start

Start of the Workflow/Process.

📦 1. Fetch Patient Profile

Retrieve existing patient data from the Patient Data Model to check for vaccination history.

📦 2. Fetch Vaccine Inventory

Retrieve current stock levels and expiration dates from the Vaccine Inventory Data Model.

📅 3. Calculate Next Dose Date

Apply a formula based on the vaccine type interval (e.g., Dose 1 Date + 21 days) to determine the follow-up schedule.

📝 4. Update Patient Vaccination Record

Update the patient's immunization record with the newly administered dose details and date.

📝 5. Create Administration Log

Generate a new entry in the Administration Logs data model to record the specific instance of the injection.



6. Decrement Vaccine Stock

Reduce the quantity available in the Vaccine Inventory Data Model by one unit.

7. Schedule Follow-up Appointment

Create a task for the Clinic Coordinator to book the patient's next immunization date.

8. Verify Expiration Date

Create a task for the Lab Technician to inspect vaccine vials for upcoming expiration.

9. Send Vaccination Confirmation

Send an automated email to the patient/guardian confirming the vaccine administered and the date of the next dose.

10. Send Appointment Reminder

Send an SMS alert to the patient's registered phone number 24 hours before the next scheduled dose.

11. Calculate Total Doses Administered

Aggregate all entries in the Administration Logs to sum the total number of vaccines given this month.

12. Calculate Wastage Rate

Aggregate expired vaccine entries vs. used vaccine entries to determine the percentage of waste.

13. Generate Monthly Immunization Report

Create a comprehensive report summarizing patient coverage, stock levels, and upcoming needs for clinic management.

14. Remove Expired Batch Record

Delete entries from the Inventory model for batches that have been physically disposed of.

End

End of the Workflow/Process.