Phase 4: Process Automation

Overview :

In Phase 4, we implemented Process Automation in our Patient Records and Treatment Tracking system to streamline treatment management, ensure accurate data, and improve communication between staff and patients. This automation tracks treatments across their lifecycle (Planned → Active → Completed) and reduces manual effort. We used Validation Rules, Flows, Email Alerts, Field Updates, and Approval Processes.

1.Validation Rules :

Purpose: Ensure essential patient and treatment data is entered correctly.

Rules Implemented:

1. **Patient Name Required** — Patient Name cannot be blank.

   o   Formula: ISBLANK(Name)'

2. **Date of Birth Check** — Date of Birth cannot be in the future.

   o   Formula: Date_of_Birth__c > TODAY()

3. **Treatment Name Required** — Each treatment plan must have a name.

   o Formula: ISBLANK(Name)

Outcome: Ensures patient and treatment records are complete and valid, preventing errors in processing.

2. Workflow Rules

Not implemented separately; replaced by Flows for better automation and control.

3. Process Builder

Previously used automation for status updates and notifications is now handled by **Flows**, improving scalability.
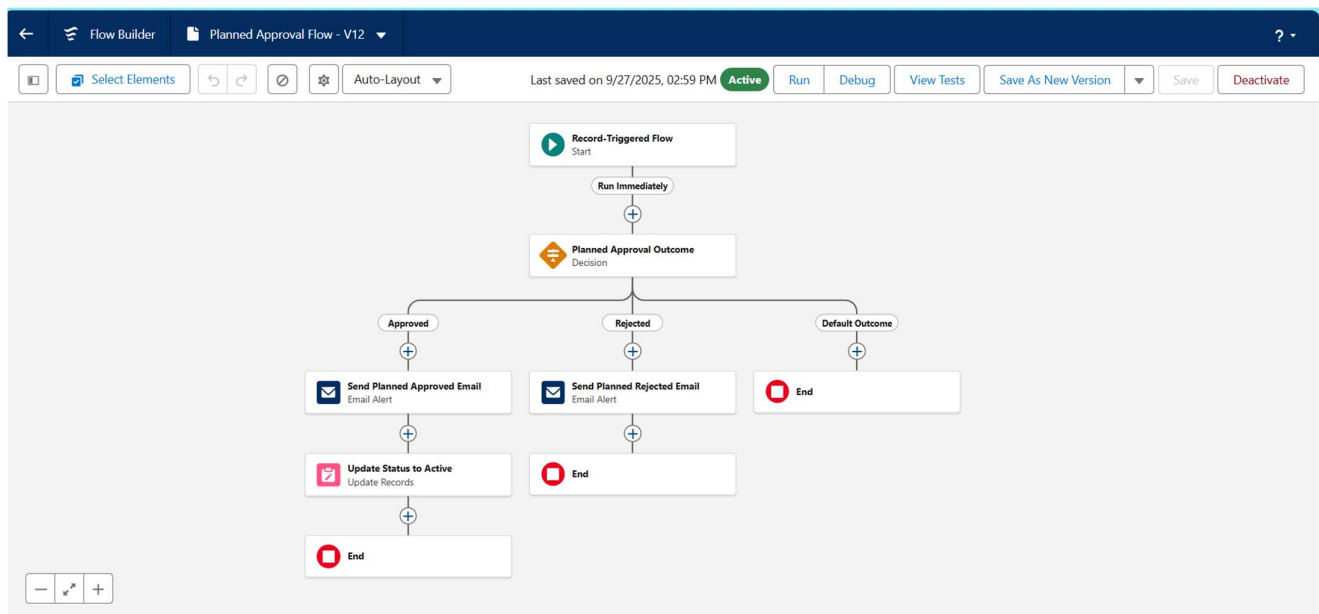
4. Flow Builder

Purpose: Automate treatment tracking, notifications, and status updates across all treatment stages (**Planned, Active, Completed**).
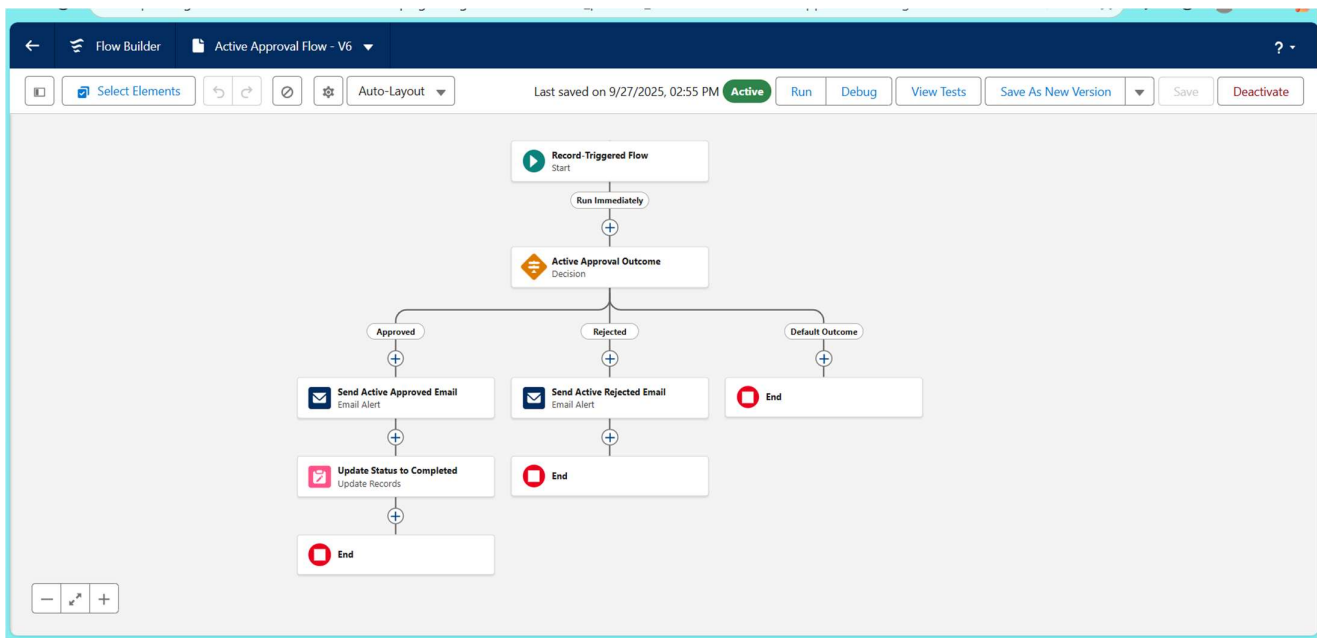
Flows Implemented:

1. **Planned Treatment Flow**

   o **Trigger:** On Treatment__c creation.

   o **Logic:**

      ▪ Mark Treatment_Status__c as **Planned**.

      ▪ Notify the assigned doctor via email.

   o **Outcome:** Ensures all new treatments are scheduled and doctors are informed.
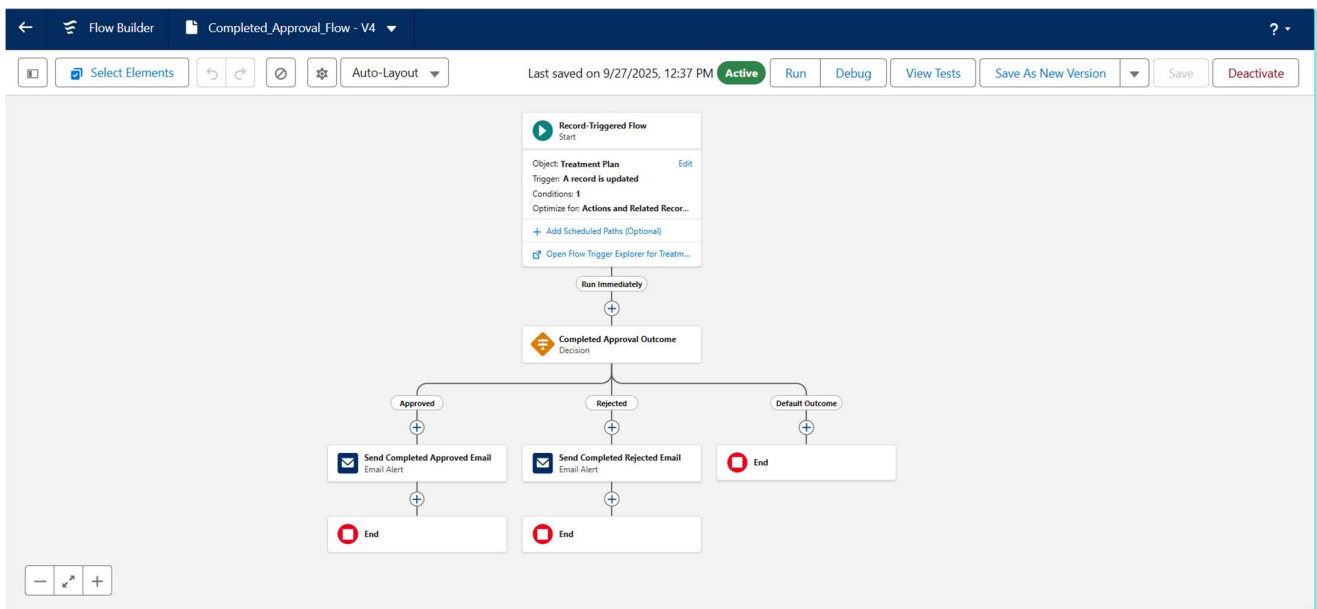

Active Treatment Flow

- Trigger: When treatment sessions start.

- Logic:

   o Update Treatment_Status__c to Active.

   o Send notifications to patient and doctor.

- Outcome: Tracks ongoing treatments automatically.

Completed Treatment Flow

- **Trigger:** When all treatment sessions are finished.

- **Logic:**

  - Update Treatment_Status__c to **Completed**.

  - Notify patient and update patient history.

- **Outcome:** Maintains accurate treatment history without manual updates.
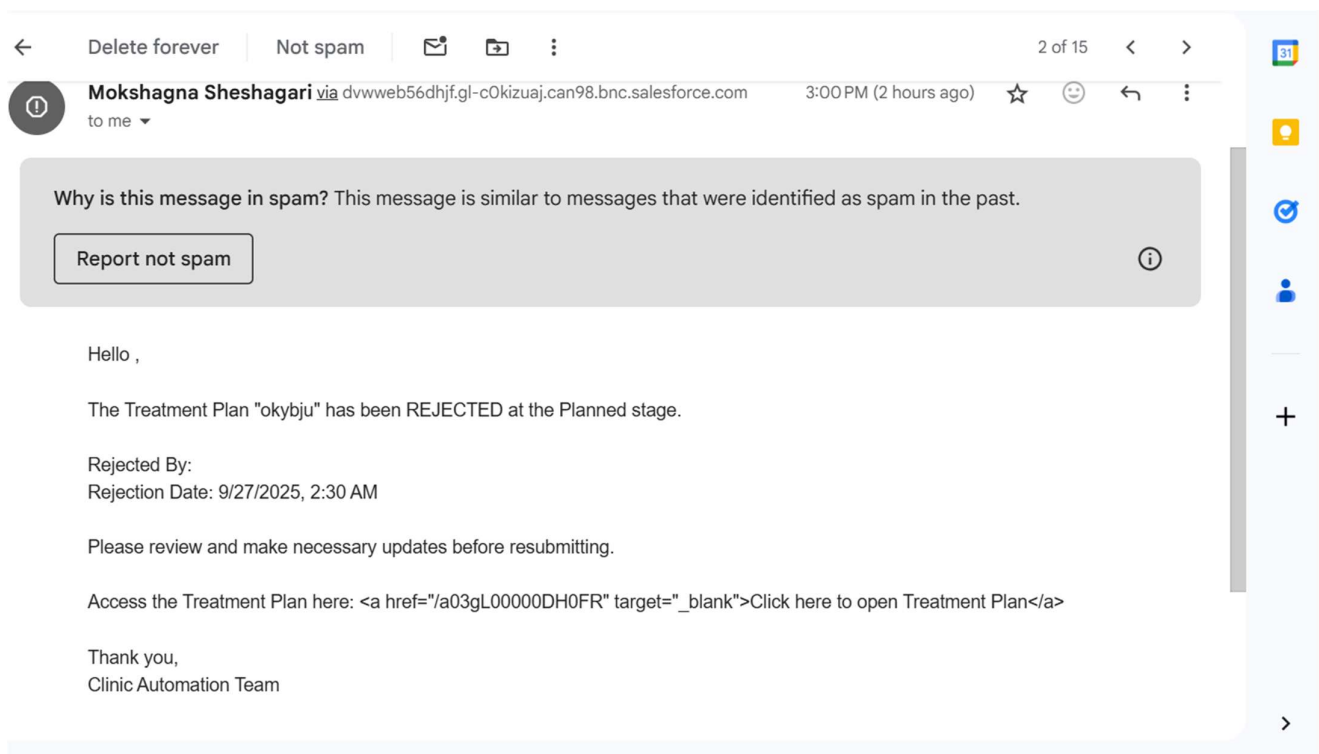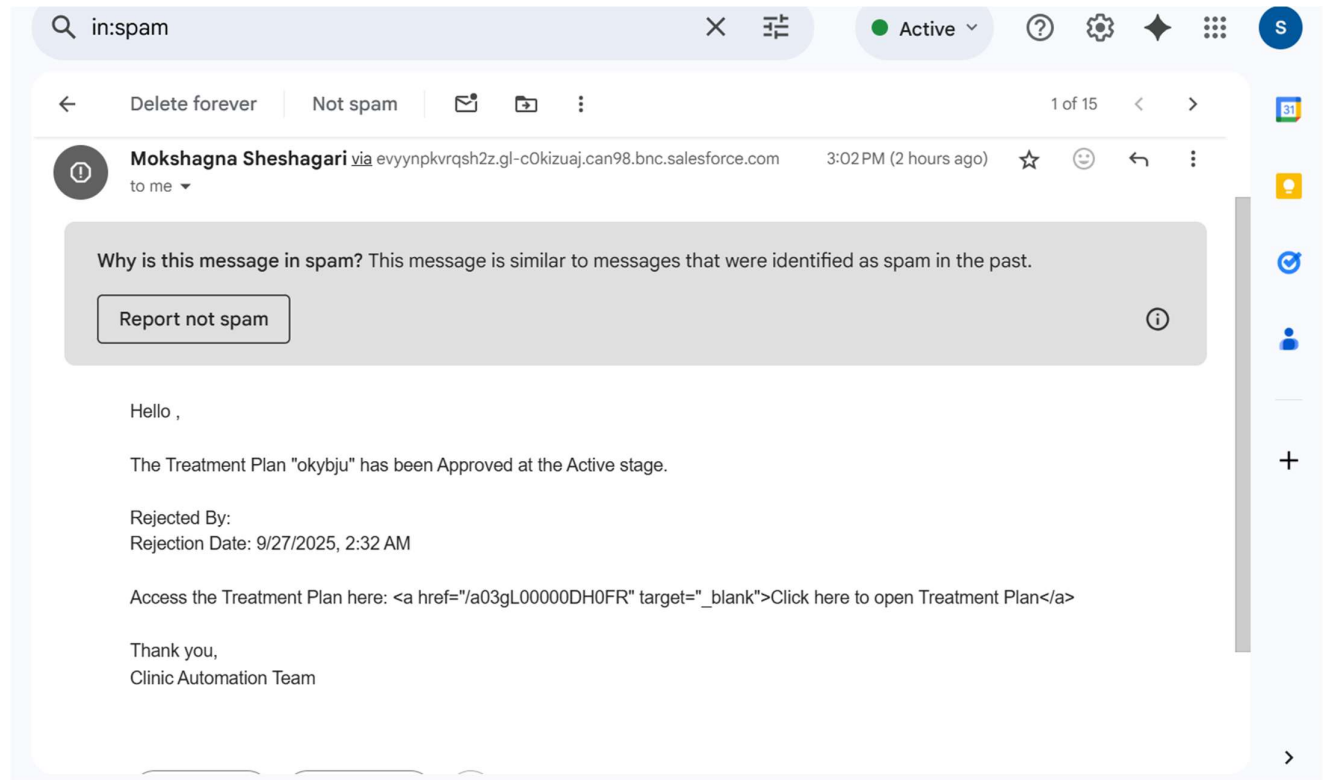

5. Email Alerts

- Configured **Email Templates**:

  - Treatment Scheduled (Planned)

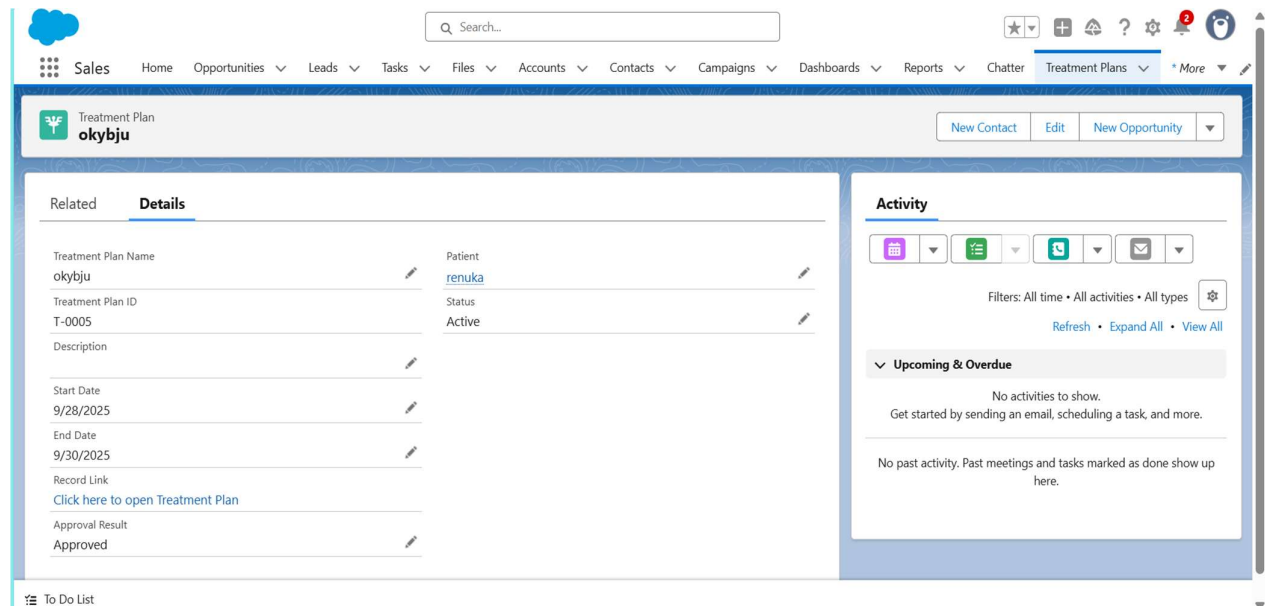 - Treatment Started (Active)

○ Treatment Completed (Completed)

- **Outcome:** Automated communication with patients and doctors for all treatment stages.

6. Field Updates

- Treatment_Status__c updates automatically:

    o Planned → Active → Completed as the treatment progresses.

- Outcome: Treatment lifecycle is maintained without manual intervention.

7. Approval Process

- Designed **Approval Process for High-Risk or Special Treatments**.

- Requests pass through **Coordinator or Senior Doctor**.

- Once approved, treatment is marked **Approved for Treatment** and progresses to Planned status.

Outcome: Sensitive treatments follow structured approval, ensuring compliance and patient safety.

Conclusion

Phase 4 introduced automation for **Planned, Active, and Completed treatments**:

- Essential patient and treatment data is validated before saving.

- Treatments automatically progress through stages with notifications.

- Doctors and patients receive timely updates.

- High-risk treatments follow a structured approval process.

This automation reduces errors, saves time, and ensures effective and timely patient care.