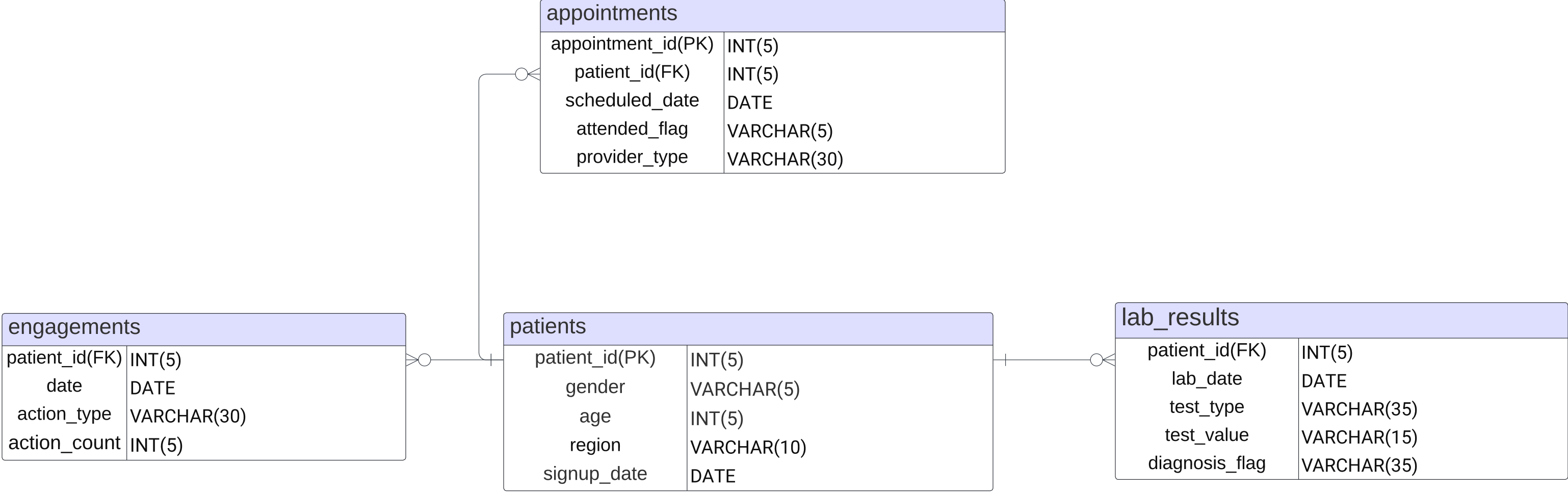


Entity Relationship Diagram



Data Assumptions:

- Appointments Table:**
 - Each appointment_id is unique and serves as the primary key. A patient can schedule multiple appointments, and each appointment is represented as a separate record in the table.
 - In the attended_flag column: 'Y' means the patient attended the appointment, and 'N' means the patient did not attend (no-show). Partial attendance or late arrivals are not recorded.
- Engagements Table:**
 - If a patient logs in twice on the same day, this is recorded as action_count = 2, rather than creating a new row. Higher counts indicate greater engagement.
 - Each patient can have zero or many engagement actions in the app.
 - The date column represents when the activity occurred, not when it was recorded.
- Patients Table**
 - Each patient_id is unique and serves as the primary key. Each patient can only have one record in this table.
 - In the gender column: 'M' means male and 'F' means female.
- Lab Results Table**
 - In the diagnosis_flag column: 'Positive' means the result is abnormal and requires a doctor's attention, while 'Negative' means the result is normal. Only 'Positive' or 'Negative' values are allowed—no borderline or inconclusive results.
 - Multiple tests on the same day for a patient are possible.
 - The test_type column contains standardized test names across providers:
HbA1c = Diabetes monitoring
LDL = Cholesterol levels
BP = Blood pressure
Glucose = Blood sugar.