

Patient Identification System

This UML class diagram outlines the core components and interactions within a patient identification system, showcasing how each class collaborates to ensure accurate patient data management.

1. IdentityManager:

This class verifies patient data through the `verifyPatientData` method. It plays a crucial role in ensuring that the patient data is correct before further processing. This step is vital to prevent any data discrepancies that could lead to serious medical errors.

2. PatientIdentifier:

Responsible for matching incoming patient IDs using the `matchPatientId` method and retrieving patient records via the `getPatientRecord` method. This class ensures that each piece of incoming data is correctly linked to the appropriate patient, which is critical for maintaining data integrity.

3. **PatientDatabase:** This class manages the patient records. It includes methods like `findPatientById` for retrieving existing patient data and `addPatientRecord` for adding new records to the database. This class serves as the backbone of the system, holding all the necessary patient information.

4. **PatientRecord:** Represents an individual patient's information, including ID, name and medical history. The `updateRecord` method allows for updating a patient's medical history, ensuring that the most current information is always available. This is essential for providing accurate and up-to-date medical care.

