Efeedor - HIS Connectivity and Integration Guide

Efeedor- HIS connectivity and Integration guide is a brief technical document or manual that provides instructions on how to integrate Efeedor (a patient experience and feedback management system) with a Hospital Information System (HIS) using APIs (Application Programming Interfaces).

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1. Introduction

The Efeedor HIS API Integration Guide is a technical reference document designed to facilitate the seamless integration of Efeedor, a comprehensive patient experience and feedback management platform, with your Hospital Information System (HIS) using Application Programming Interfaces (APIs).

This integration allows for real-time data exchange between systems, enabling hospitals to streamline patient feedback collection, issue resolution, concierge services, and analytics - enhancing overall patient satisfaction and operational efficiency.

2. API Integration Guidelines

Integration is done by pushing patient data from the hospital's HIS to Efeedor's API.

There are two integration models supported:

- Push Model (Recommended): HIS system sends data via HTTPS to Efeedor's API endpoint.
- Pull Model (Planned): Efeedor periodically queries HIS (requires future setup).

2.1 API Endpoint & Authentication

API Endpoint:

POST https://hmsuat.efeedor.com/api/add_patient.php

Required Headers:

- Content-Type: application/json
- Token: b2a5e7c9d3f1428c8f57a3e91a6f4f11

Ensure the token is kept confidential. Rotate tokens periodically for security.

2.2 JSON Payload Schema

Field Descriptions:

- name (string): Full name of the patient

- hospital_id (string): Unique identifier for hospital
- email (string): Email address
- mobile (string): Contact number (must be unique)
- patient_id (string): Unique ID for the patient
- gender (string): Male/Female/Other
- age (integer): Patient's age
- admitedfor (string): Reason for admission
- ward (string): Ward name
- bed_no (string): Bed number
- admited_date (datetime): Format 'YYYY-MM-DD HH:MM'
- discharged_date (datetime): Format 'YYYY-MM-DD HH:MM'

2.3 Example JSON Payload


```
{
 "name": "Jane Doe",
 "hospital_id": "HOSP456",
 "email": "jane.doe@example.com",
 "mobile": "9876543210",
 "patient_id": "PAT123",
 "gender": "Female",
 "age": 29,
 "admited_for": "General Checkup",
 "ward": "Ward B",
 "bed_no": "B12",
 "admited_date": "2024-11-01 10:00",
 "discharged_date": "2024-11-05 15:00"
}
```


2.4 Example cURL Command

```
curl --location 'https://hmsuat.efeedor.com/api/add_patient.php' \
--header 'Content-Type: application/json' \
```

```
--header 'Token: b2a5e7c9d3f1428c8f57a3e91a6f4f11' \
--data-raw '{
 "name": "Jane Doe",
 "hospital_id": "HOSP456",
 "email": "jane.doe@example.com",
 "mobile": "9876543211",
 "patient_id": "PAT1231",
 "gender": "Female",
 "age": 29,
 "admitedfor": "General Checkup",
 "ward": "Ward B",
 "bed_no": "B12",
 "admited_date": "2024-11-01 10:00",
 "discharged_date": "2024-11-05 15:00"
}
```

2.5 Error Handling

Common HTTP Status Codes:

- 200 OK: Data successfully received
- 400 Bad Request: Malformed JSON or missing fields
- 401 Unauthorized: Invalid token
- 409 Conflict: Duplicate mobile or patient_id
- 500 Internal Server Error: Unexpected issue on server side

2.6 Security and Compliance

- Always use HTTPS for data transmission.
- Do not expose the token in client-side applications.
- Validate patient identifiers before submission.
- Ensure all fields are properly sanitized to avoid injection attacks.

2.7 API Response Sample

Success:

{
"status": "success",
"message": "Patient record added successfully."
}

Failure:

{
"status": "error",
"message": "Missing required field: patient_id"
}

2.8 Pull Model

Our Application Pulls Data from Their API

If the hospital has their own API endpoint, we can pull data if the following fields are available:

- name: Full name of the patient
- hospital_id: Unique identifier for the hospital
- email: Patient email (optional)
- mobile: Patient mobile number
- patient_id: Unique identifier for the patient
- gender: Male/Female/Other
- age: Patient's age (number)
- admitedfor: Reason for admission or diagnosis
- ward: Ward name/number
- bed_no: Bed number
- admited_date: Admission date and time in YYYY-MM-DD HH:MM format
- discharged_date: Discharge date and time in YYYY-MM-DD HH:MM format

Authentication details, API URL, headers, and sample payloads must be shared with our integration team.

3. Hosting Requirements

Infrastructure and environment prerequisites for hosting Efeedor securely within the hospital or partner ecosystem:

- OS: Ubuntu 20.04+
- RAM: 8GB+
- CPU: 4 cores
- Disk: 100GB SSD+
- Web Server: Apache/Nginx
- PHP: 7.4+ (extensions: curl, mbstring, json, mysqli, openssl, zip, xml, gd)
- MySQL: 5.7+
- Internet access for API requests
- SSL certificate for HTTPS

4. WhatsApp Gateway Integration

Purpose: Automate communication with patients via WhatsApp.

Steps:

1. Choose a WhatsApp API Provider (e.g., Twilio, Gupshup, Meta)
2. Register a Business Phone Number
3. Apply for Template Approval
4. Obtain API Credentials
5. Integrate with Efeedor (backend API settings)
6. Testing (send test messages, check logs)
7. Compliance (store patient opt-in consent securely)

5. Email/SMTP Gateway Integration

Purpose: Use email for system alerts, feedback responses, and escalations.

Steps:

1. Choose SMTP Method (in-house or external like SendGrid, SES)
2. Collect SMTP Config (host, port, credentials, encryption)
3. Configure in Efeedor (admin panel settings)
4. Create Notification Templates
5. Test Email Delivery
6. Ensure Deliverability (SPF, DKIM, DMARC setup)