

**WSO2con**  
NORTH AMERICA

May 20 - 22, 2026 | Austin, Texas, USA



# Agentic Healthcare

The new operating system for medicine



**Mifan Careem**

SVP and GM, Solutions



# Consumer facing agents in healthcare

### Differential diagnosis and likelihood

Diagnosis	Likelihood	Rationale
Post-stroke cognitive impairment (PSCI)	High	Stroke is a major risk factor for cognitive decline. PSCI can emerge or progress months to years later, even with good initial recovery. Executive dysfunction and behavioral changes are common; functional independence may be preserved in milder forms. <a href="#">Circulation Research</a>
Vascular cognitive impairment (no dementia)	High	Subjective memory impairment is characteristic of MCI. <a href="#">Post-Stroke Cognitive Impairment and Dementia Natalia S. Rost, et al. 2022</a>
Depression or anxiety ("pseudodementia")	Moderate	Mood disorders can cause prominent subjective memory complaints and irritability with relatively preserved objective cognition. Must be actively considered for possible mood, stroke, or

I am a neurologist following a 79-year-old patient who had an ischemic stroke 2 years ago with minimal residual deficits. At his most recent visit, he reported memory decline, including losing his phone, and has become more irritable. His functional status in daily activities is mostly preserved. Should these symptoms raise suspicion for dementia, or are they more consistent with normal age-related cognitive changes? Provide a differential diagnosis and explain why it's likely or not.

### Clinical Documentation

Generated from visit recording | Dec 18, 2025 | 12:34 PM

#### Patient

[Name] | DOB: XX/XX/XXXX | MRN: 4892

#### Visit Summary

##### Chief complaint

Persistent cough and fatigue for 2 weeks

##### History of present illness

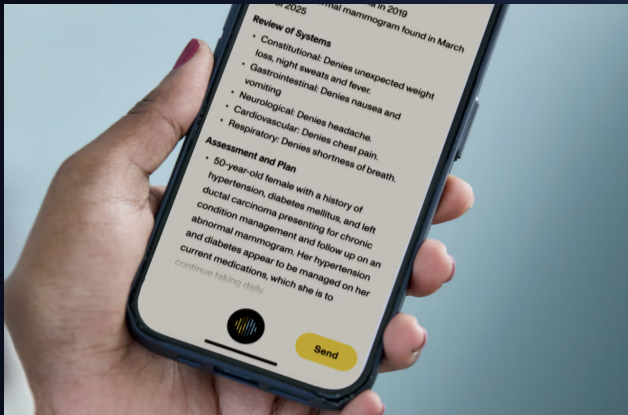
Patient reports dry cough beginning approximately 14 days ago, worsening over the past week. Associated fatigue and mild shortness of breath with exertion. Denies fever, chills, or night sweats. No recent travel or known sick contacts.

##### Physical Exam

**Prompt**  
Here's the recording from my visit with the patient. Generate clinical documentation including the visit summary, assessment, and plan. Play anything that needs to be reviewed before signing.

**Attachments**

- Patient visit recording file: 12345
- Patient chart MRN: 4892
- Chart: 12345
- PDF



## Dragon Copilot

empowering the physician workflow

Search patients | Patient session | Timeline | Notes | Tasks

12/18/2025 | 12:34 PM | 12:34 PM

John Smith | 12/18/2025 | 12:34 PM

John Smith is a 60-year-old male with a history of diabetes and hypertension who is experiencing the following:

- 12/18/2025 | 12:34 PM | 12:34 PM
- 12/18/2025 | 12:34 PM | 12:34 PM
- 12/18/2025 | 12:34 PM | 12:34 PM

He has been experiencing a severe sore throat and hoarseness with no signs of improvement. The symptoms are chronic and cold, but they seem to be slightly more severe this time and are disrupting his life. He has not taken any cough medicine but has some temperature. He reports no known exposure to sick individuals or recent travel. The symptoms are always related. He has not taken any cough medicine but has some symptoms with cough drops, which have proven ineffective. He has found some relief but has taken a few times. Additionally, he reports mild pain in his left ear.

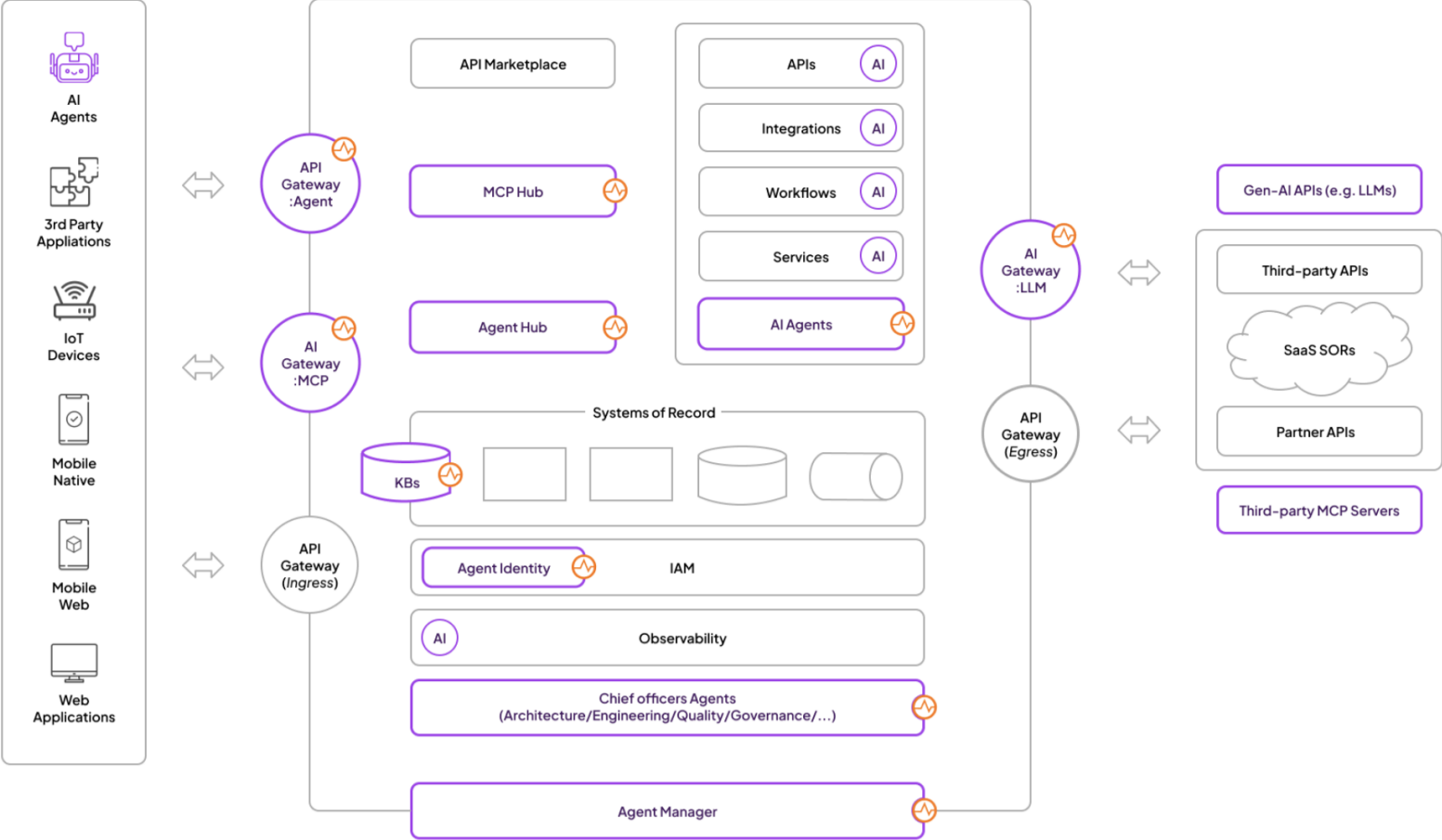
He also reports an improvement in his reflux symptoms, attributing this to his new diet.

Apply my skills | Submission notes | Draft an after visit summary | Get coaching | Change plan

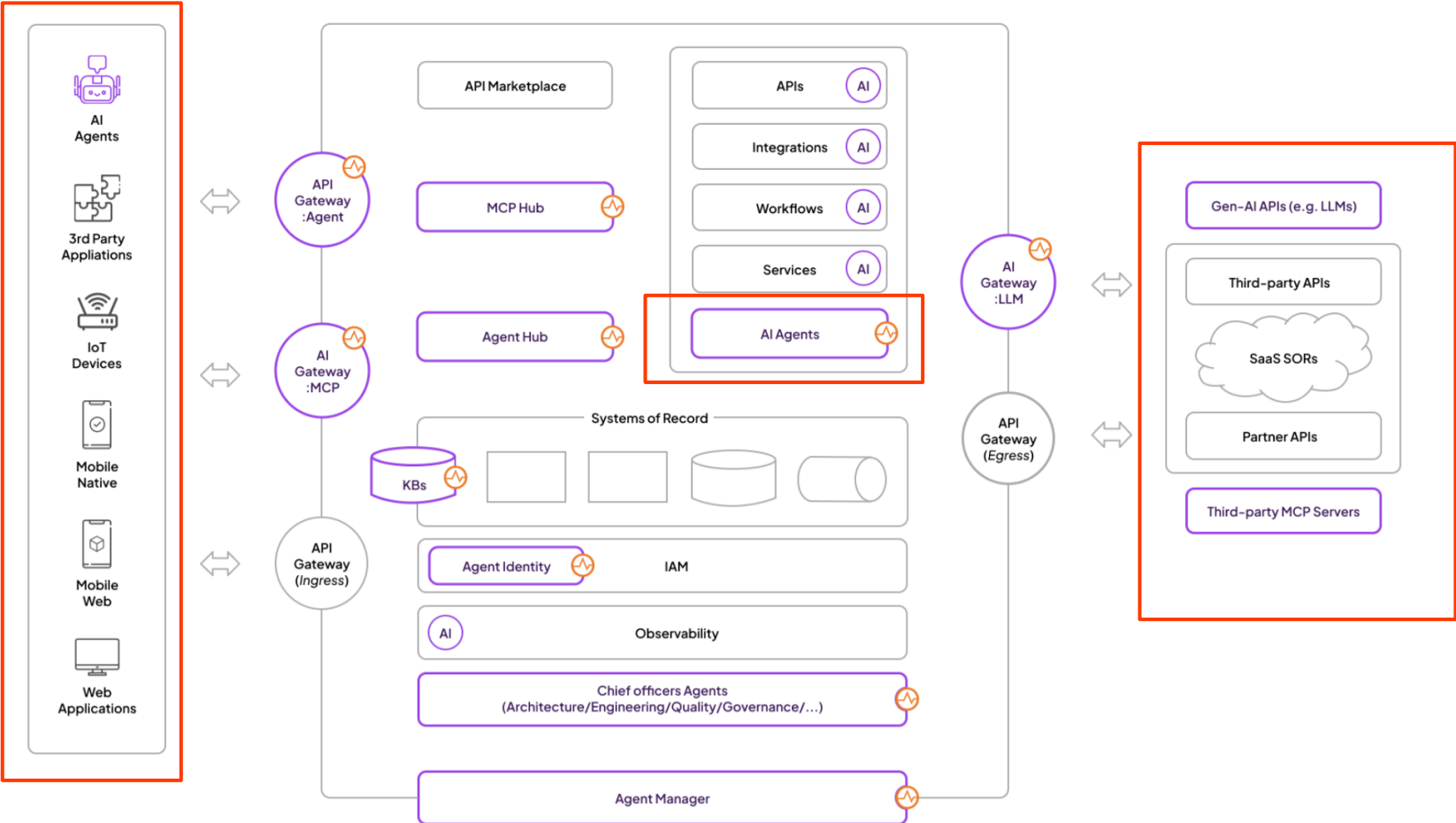
When can Dragon Copilot help you next? | 00:34



# WSO2 agentic fabric for your agentic enterprise

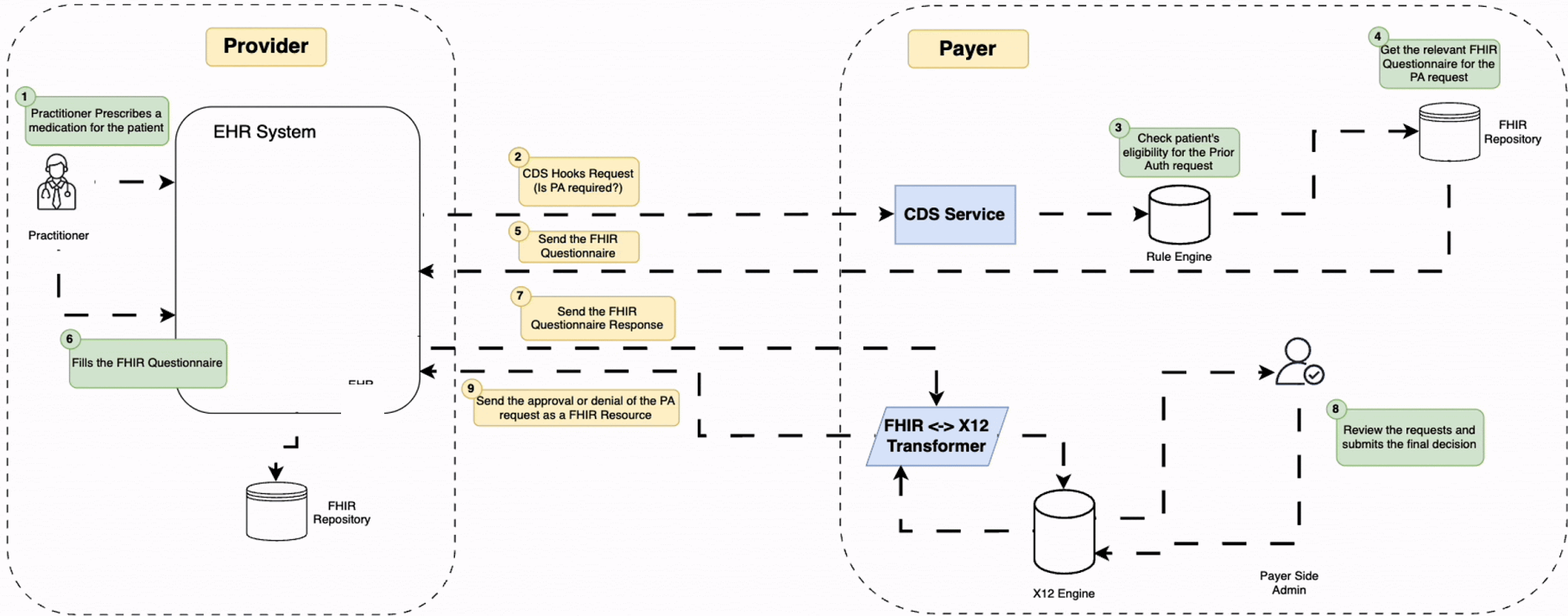


# WSO2 agentic fabric for your agentic enterprise



# Payer workflow automation - Prior Authorization Flow

- A** **Clinical Requirements Discovery (CRD):** Evaluate prior authorization necessity for the prescription drug, treatment or the medical equipment
- B** **Documentation Templates and Rules (DTR):** Capture documentation required by the Payer directly within clinical workflows
- C** **PA Submission (PAS):** Payer adjudicates the prior authorization request and returns a decision



# FHIR Questionnaire Generation

- AI-generated FHIR Questionnaires
- Human-in-the-loop validation for accuracy and compliance
- Periodic regeneration triggered by policy updates

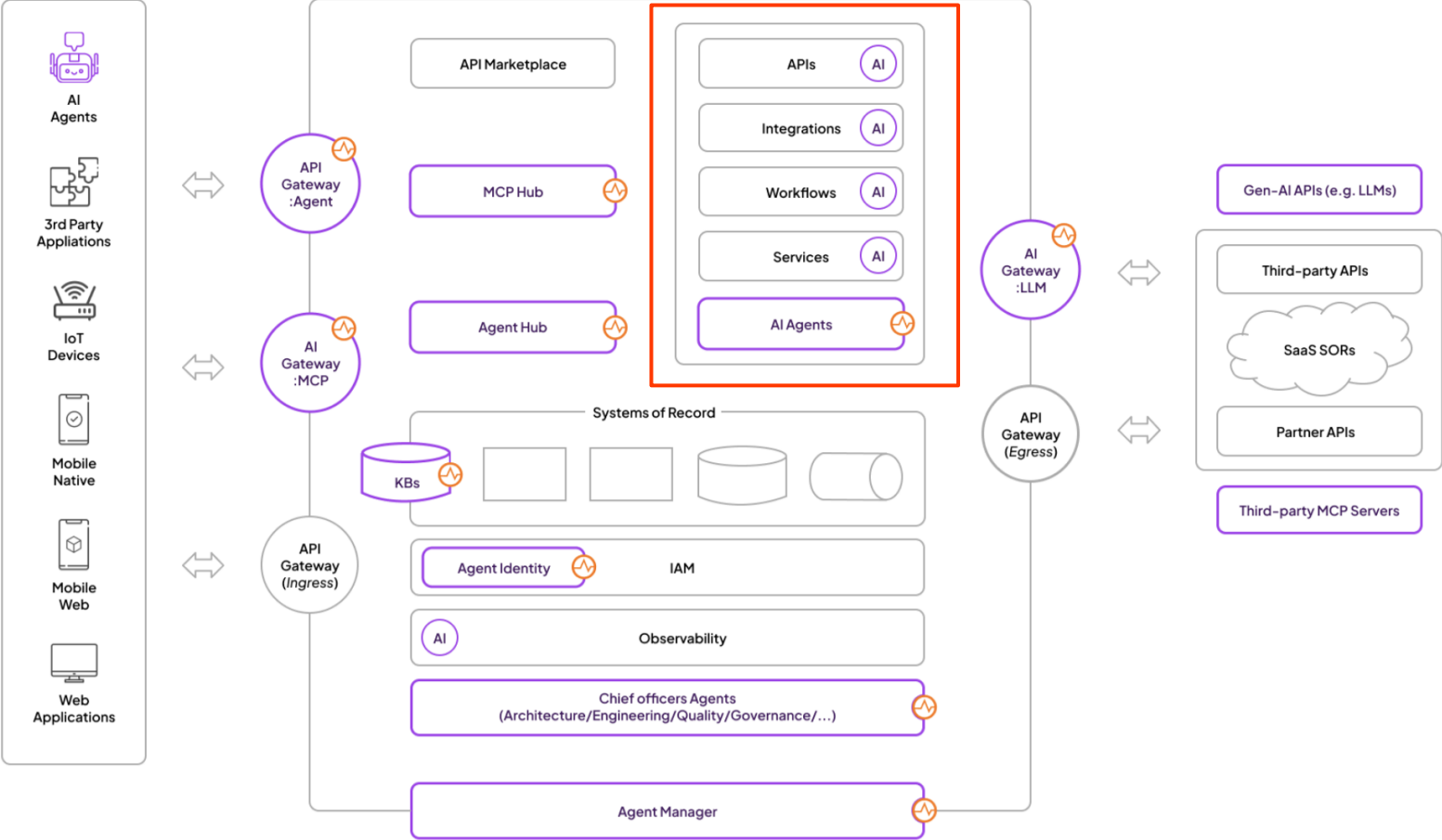
# Evaluating the PA request with AI Agent



# Evaluating the PA request with AI Agent

- AI agent is provided with the knowledge base to evaluate the PA request
- Human validated response is sent back to EHR

# WSO2 agentic fabric for your agentic enterprise



# A Global Regulatory Landscape Is Converging on Interoperability & AI Governance



## United States

### CMS-0057-F

Payer-to-payer data exchange & prior auth.

### 21st Century Cures Act

Information blocking & patient access.

### ONC HTI-1 Rule

Predictive AI transparency & certification.



## European Union

### EU AI Act

Risk-based framework for AI systems.

### EHDS

European Health Data Space for research.

### GDPR (Health Context)

Privacy & data protection foundations.



## UK & Asia-Pacific

### UK NHSX AI Framework

Buyer's guide for AI in healthcare.

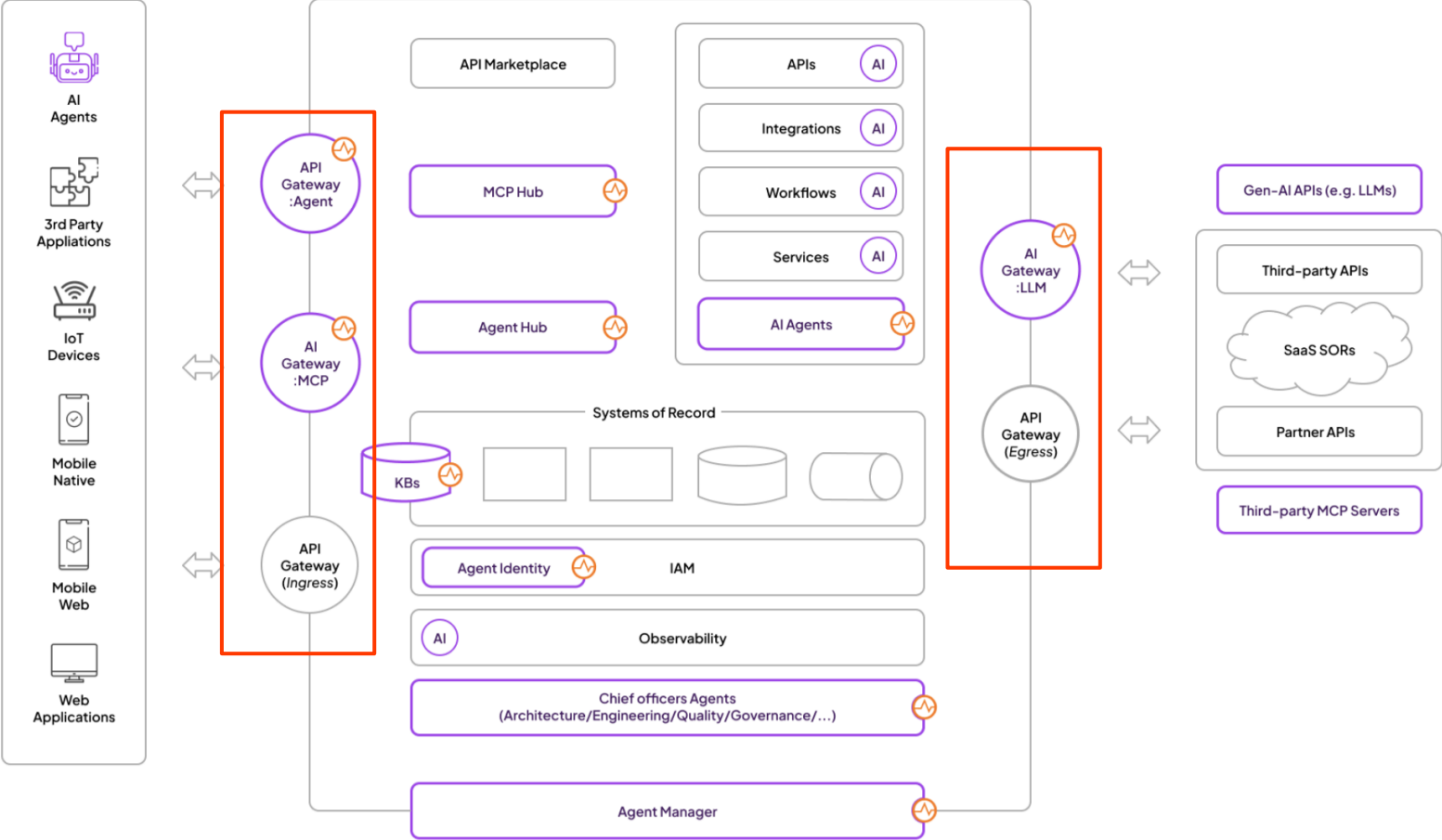
### Australia My Health Record

Centralized electronic health record.

### Singapore PDPA / MOH AI

Data protection & healthcare AI ethics.

# WSO2 agentic fabric for your agentic enterprise



# The Standards Stack: From Data to Agent Collaboration

## MCP — Model Context Protocol

### Agentic Interoperability Layer

- Agent-to-agent communication
- Tool discovery and invocation

## FHIR R4 / R5 — Fast Healthcare Interoperability Resources

### Clinical Data Exchange Standard

- Prior Authorization Support (PAS) API
- Coverage Requirements Discovery (CRD)

## HL7 v2 / C-CDA — Legacy Clinical Messaging

### Installed Base Interoperability

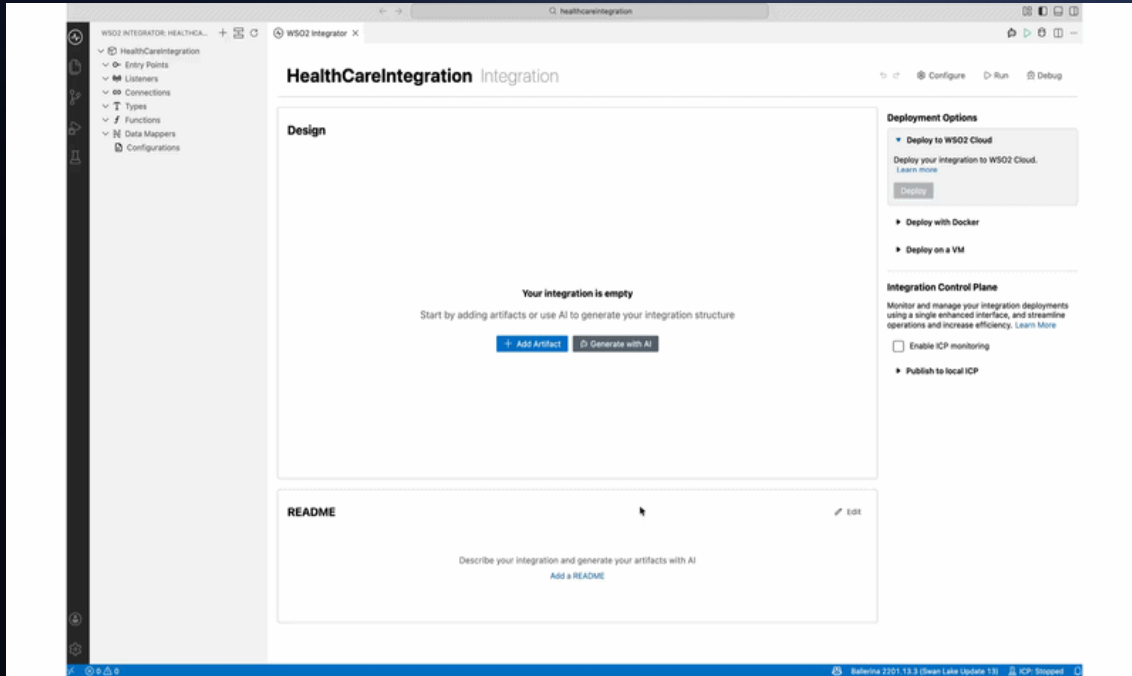
- ADT notifications for care coordination
- Lab and radiology result delivery

## Context Graphs — Agentic Memory & Reasoning Context

### Real-Time Clinical Context

- Patient longitudinal record assembly
- Coverage & authorization history

# Healthcare native AI co-pilot



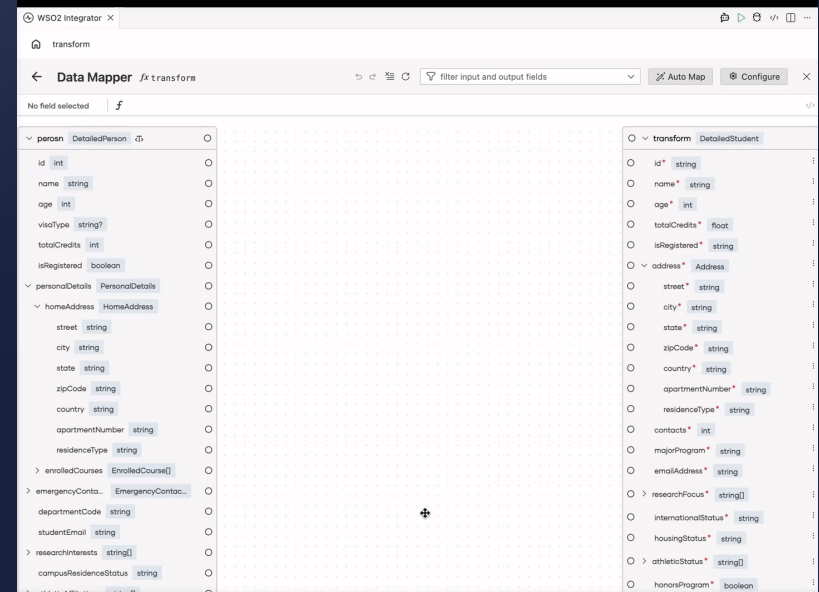
Sample prompt:

Write a service to retrieve patient demographics from an EHR system using FHIR R4 APIs. The system requires authentication via OAuth 2.0 and must filter patients by last name and date of birth. Take the search parameter values from the API request. Respond to the API client with the patient demographics data. This API should not be FHIR and please define a custom API as appropriate. Expose this via MCP



# Ballerina - the healthcare native language for agents and humans alike

- Ballerina is only cloud native technology built for integration that is optimised for healthcare
- Natively uses FHIR, HL7, X12, CDS as first class citizens.
- Includes health tooling to autogen any healthcare implementation guide
- Visual and AI driven data mapping for source to destination mapping

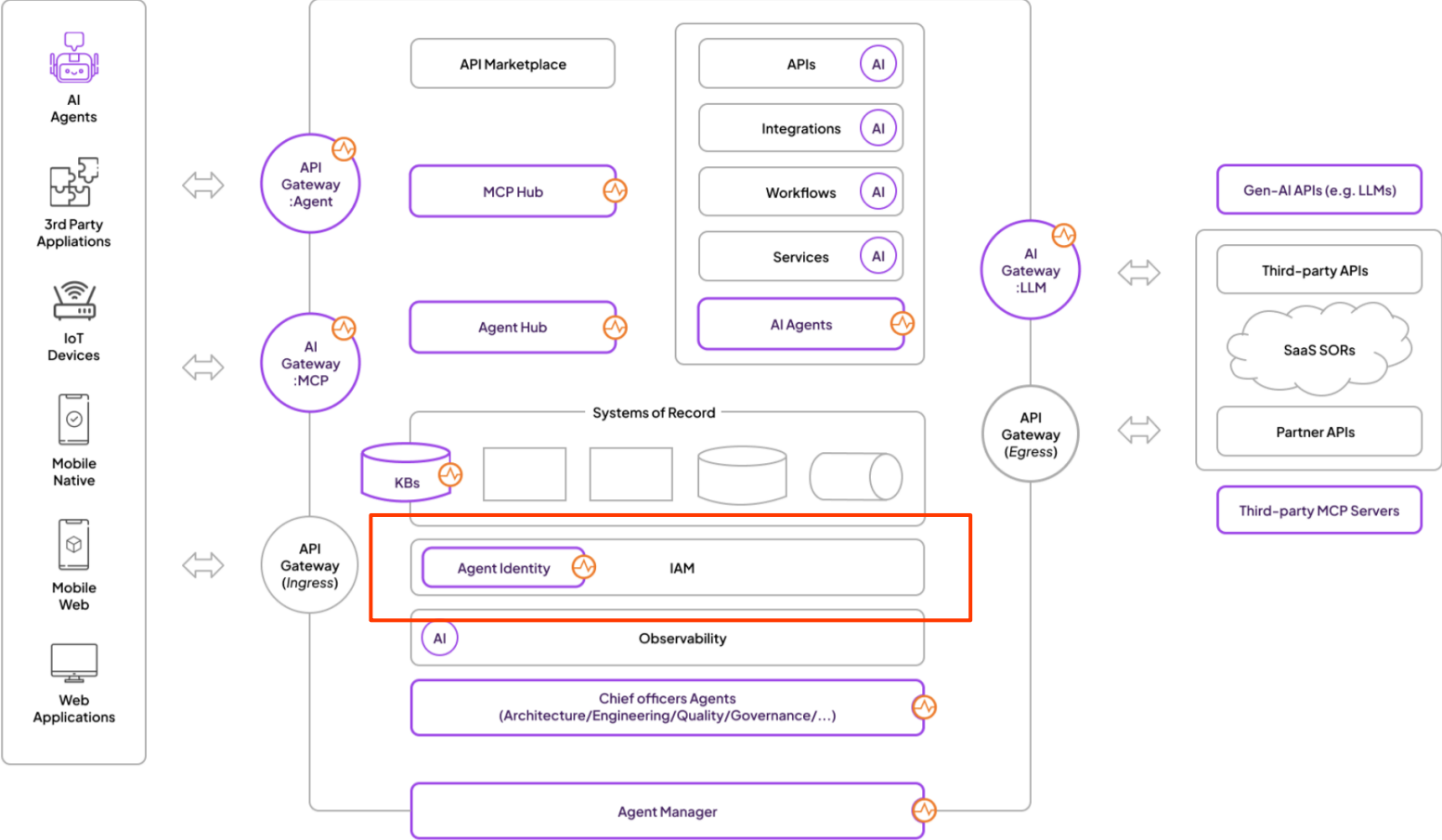


Upto **70%**

design time productivity gains in healthcare use cases.



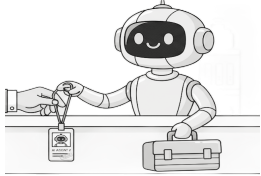
# WSO2 agentic fabric for your agentic enterprise



# The Four A's: The Pillars of Agent Identity to address AI Agent Challenges

Healthcare AI cannot scale without a principled answer to: who is this agent, what can it do, and what did it do?

## Administer



Uniquely define, provision, and manage agent identities

- Who are the trusted agents in the system?
- What are there capabilities and limitations?
- What is the AI model?
- How to suspend an misbehaving agent?

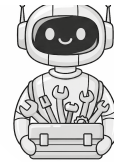
## Authenticate



Issue secure credentials for agent access

- Who is this agent?
- How do you validate it's your friendly agent?
- How do you securely assign credentials to the agent?

## Authorize



Enforce Policies for Agent and Agent-Based Actions

- SMART/FHIR scopes
- What systems/tools can it access?
- When can it act autonomously vs. requiring human approval?

## Audit



Enable tracking agent activity for accountability

- FHIR audit events
- Who is responsible for agent actions?
- How do we audit agent behavior?
- How do we ensure compliance?

# Open Healthcare - packaged offering for healthcare

- Custom
- WSO2 Platform
- WSO2 Accelerators



Patients / Practitioners / Management

- Contact Center
- Appointment Booking / Emergency Care Apps
- Patient Portals
- Population Health Analytics

Consumer Apps

AI Agents	MCPs	APIs	Integrations	Healthcare Accelerators
Appointment Scheduling	FHIR MCP - Any FHIR API over MCP	FHIR APIs - Resources - Audit - Terminology	Custom connectors (Any REST API or FHIR API)	Connectors (FHIR, Epic, Cerner, Athena, ..)
Patient Support	REST API MCP - Any Open API based API over MCP	Master Patient Index  Consent management	Custom message structures (json, xml, csv, text)	Messaging (FHIR, HL7, X12, CCDA, ..)
Population Health	MCP Auth - Precise access controls - Consistent Authz rules	OpenID Connect / OAuth 2.0 based security	Custom data mappings (using visual tools, AI auto-map)	Security (SMART-on-FHIR, OAuth 2.0, Basic Auth, MTLS)
Custom AI Agents	Agent Identity Management	IHE Profiles  Business APIs		Transformers (HL7v2 to FHIR, CCDA to FHIR, X12 to FHIR, ...)
Identity and Access Management (+Customer Data Service Add-on)   Integration   API Management				

FHIR Repository (PostgreSQL)

Systems of Record

- EMR/EHR (Cerner, Epic, Athena, FHIR,..)
- Laboratory Information System (LIS)
- Radiology Information System (RIS)
- Pharmacy Management System
- Billing and Financial Management System

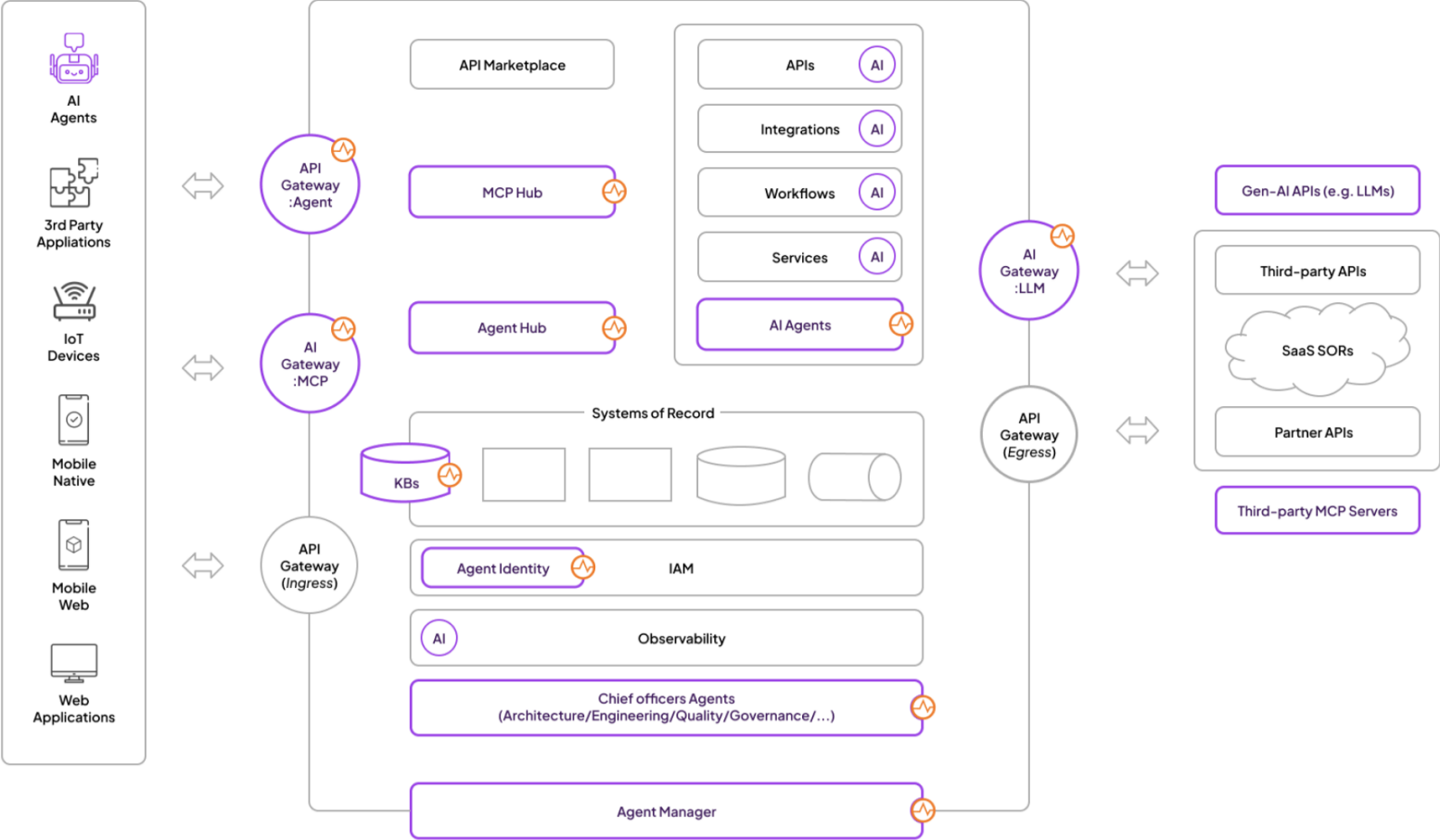
AI

Development Tools

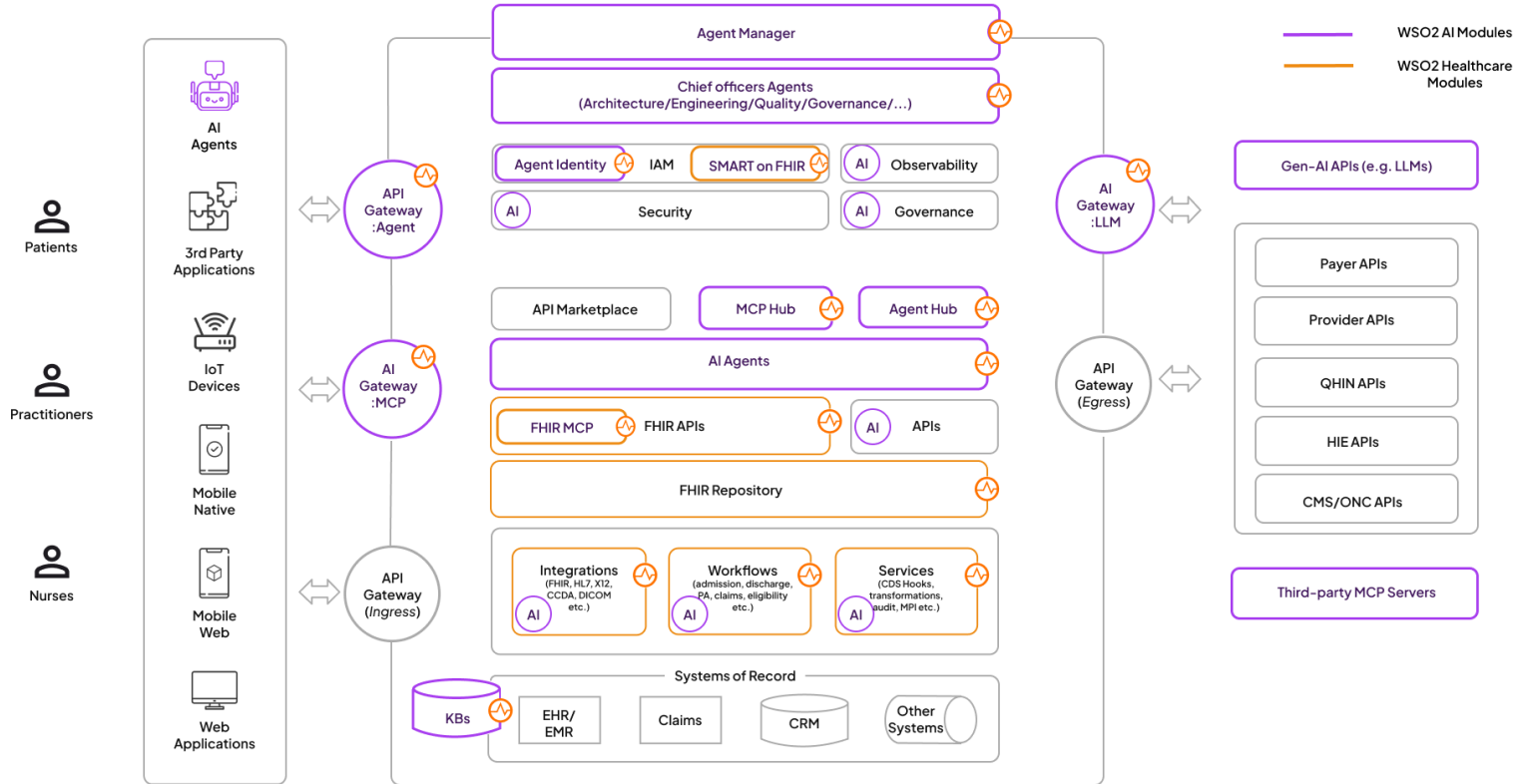
- FHIR Package Gen Tool
- FHIR API Template Gen
- CDS Template Gen
- Healthcare Copilot

Digitalization

# WSO2 agentic fabric for your agentic enterprise



# The agentic healthcare enterprise



# The agent fabric to build **the agentic healthcare enterprise**



Build innovative applications quickly, easily, and securely by utilizing digital PaaS-empowered accelerators

