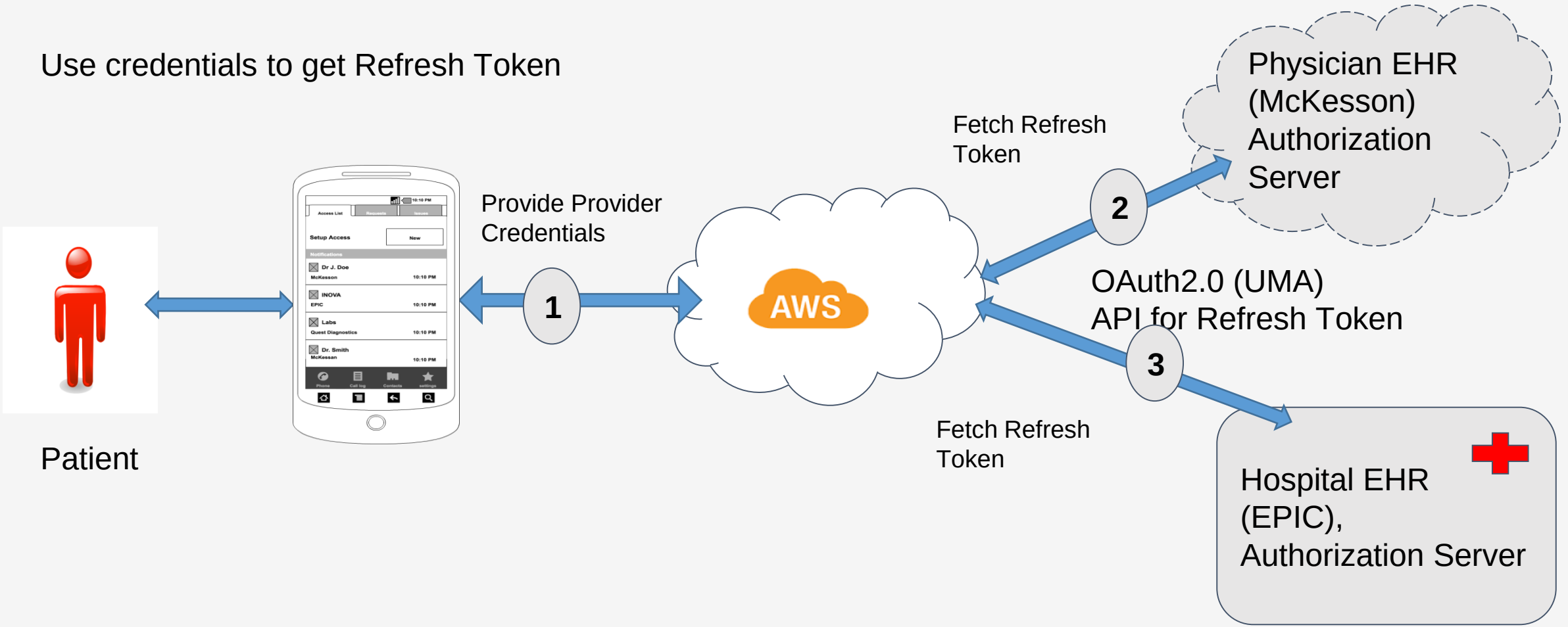
Move Health Data Forward Challenge

September 8, 2016

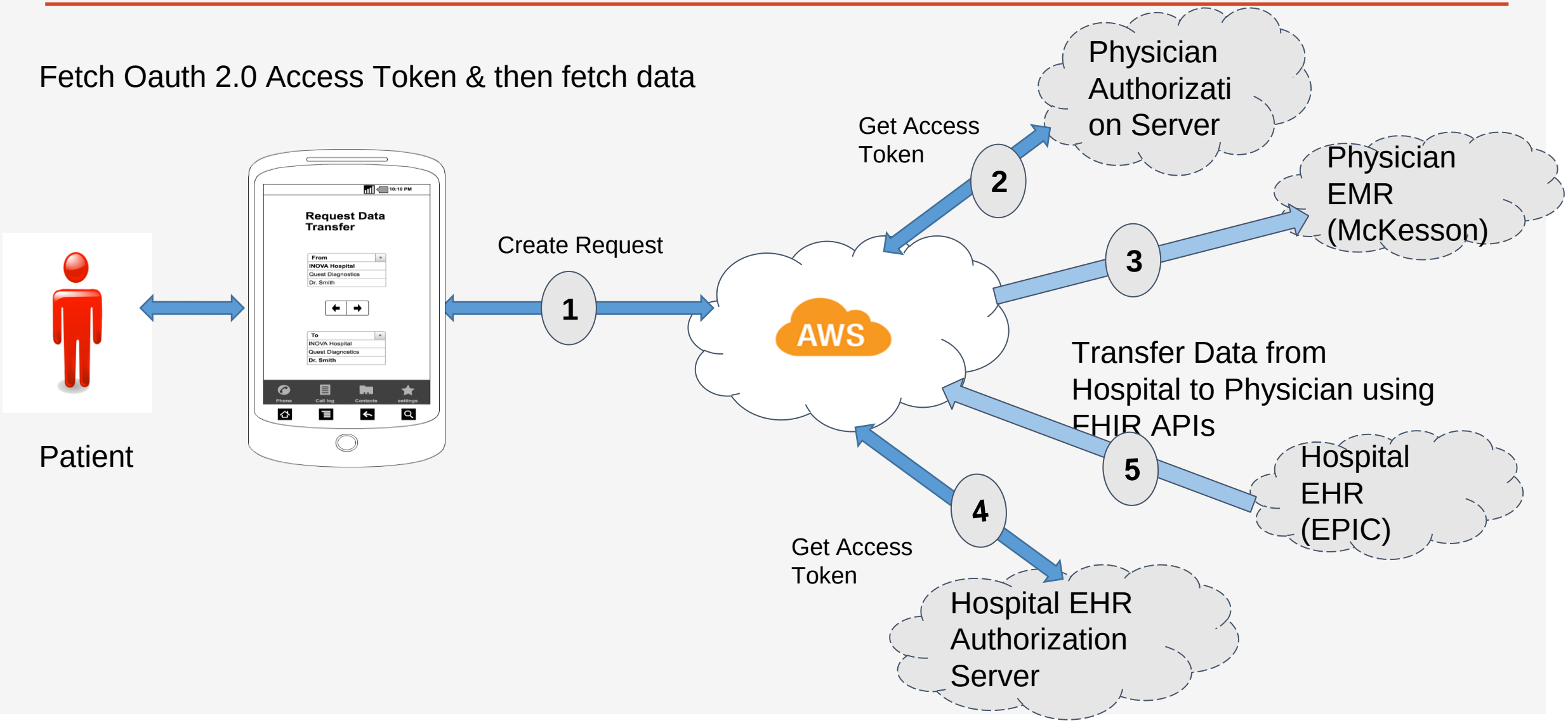
Setup Mobile/Portal Application

Use credentials to get Refresh Token

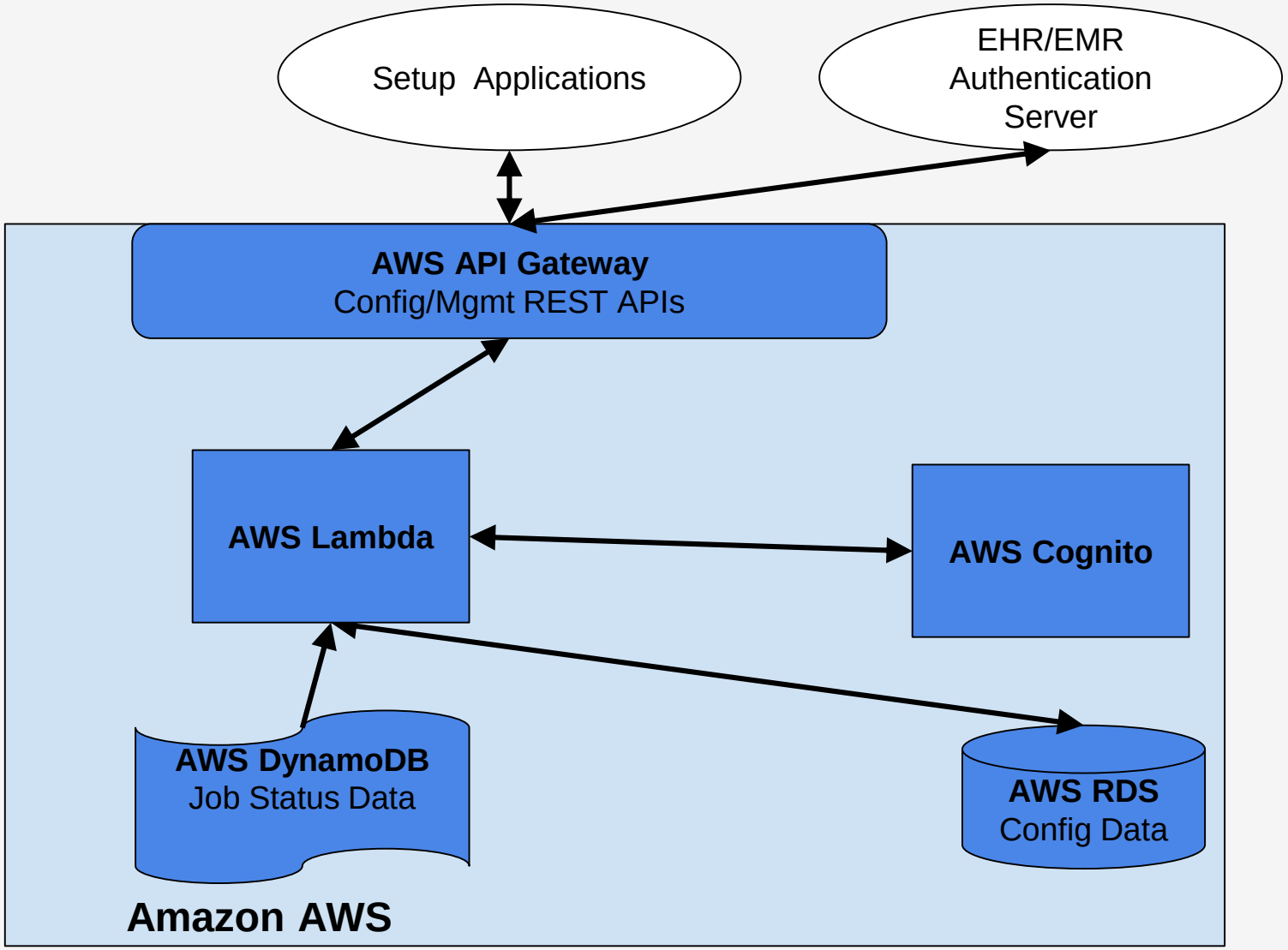


Data Transfer

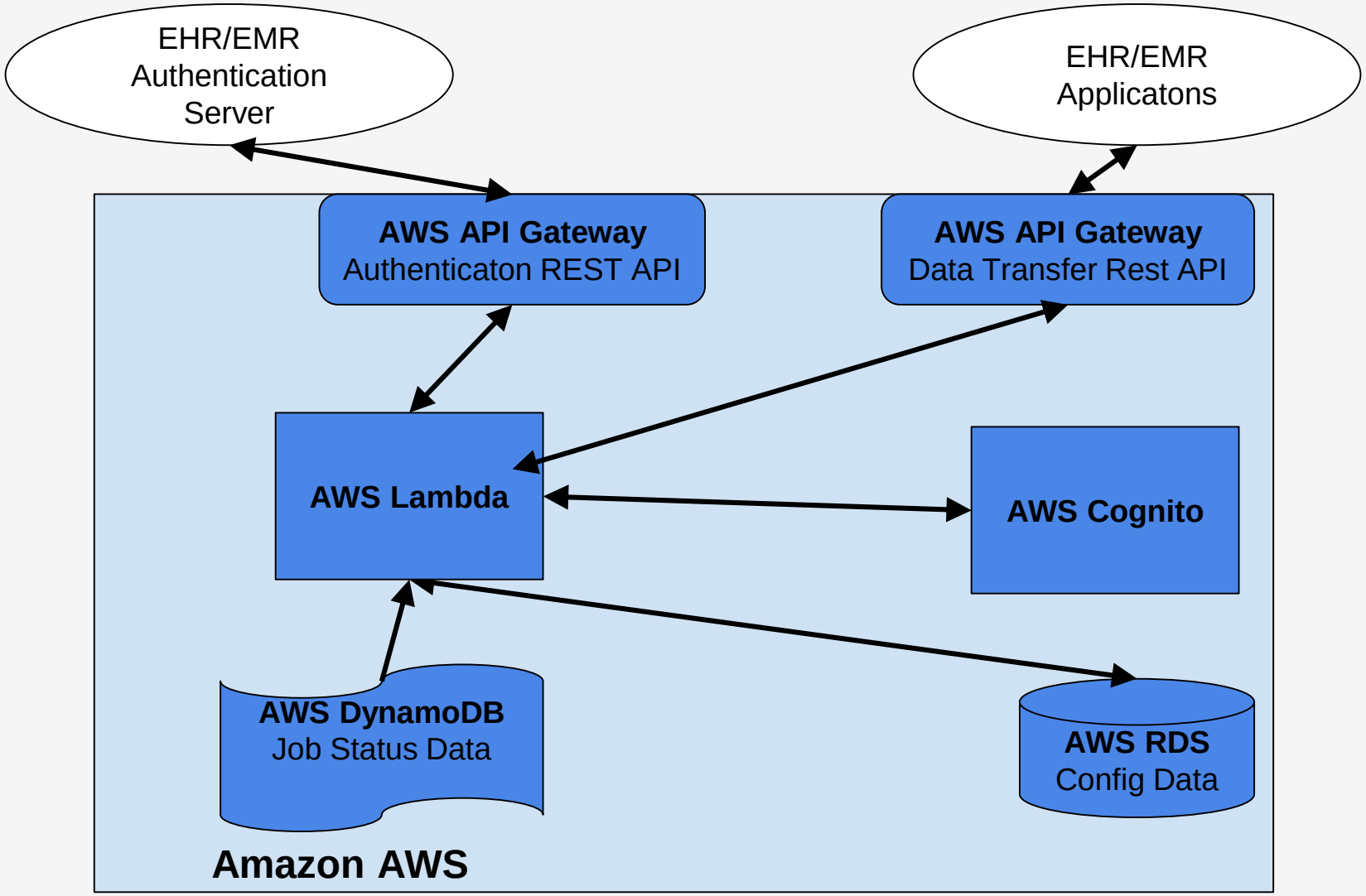
Fetch Oauth 2.0 Access Token & then fetch data



Configuration



Configuration



API Solution Components

1. Setup Mobile/Portal Application
2. Setup API
3. Request Application
4. API to Create Request
5. Fetch Token Process
6. Data Transfer Process
7. AWS Configuration

Solution Components - Setup

1. Setup Mobile/Portal Application

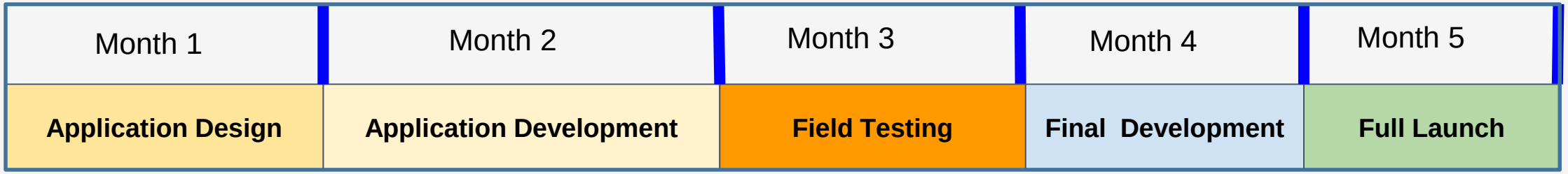
- The setup mobile/Portal Application is built using AngularJS/HTML5 and enables patients to add credentials for all Health record applications.
- The Mobile/Portal Application manages security security credential create/updates using REST APIs hosted on AWS.
- JAVA Batch processes running on AWS use AWS Cognito for the implementation of OAuth2.0 , OpenID Connect and User Access Method specifications

Solution Components - Data Transfer

1. Data Transfer Application -

- The Data Transfer Application first needs to fetch access tokens from the authorization servers of EHR/EMR applications before fetching or updating data.
- Data Transfer Application hosted on AWS then uses FHIR APIs of EHR?EMR applications to fetch health data from source application and update target data.
- The AWS components of Lambda , SQS and databases like RDS and DynamoDB are used to manage and store profile and refresh tokens as well as fetching data using FHIR APIs of EMR/EHR applications

Timeline


Month 1
Month 2
Month 3
Month 4
Month 5
Application Design
Application Development
Field Testing
Final Development
Full Launch