

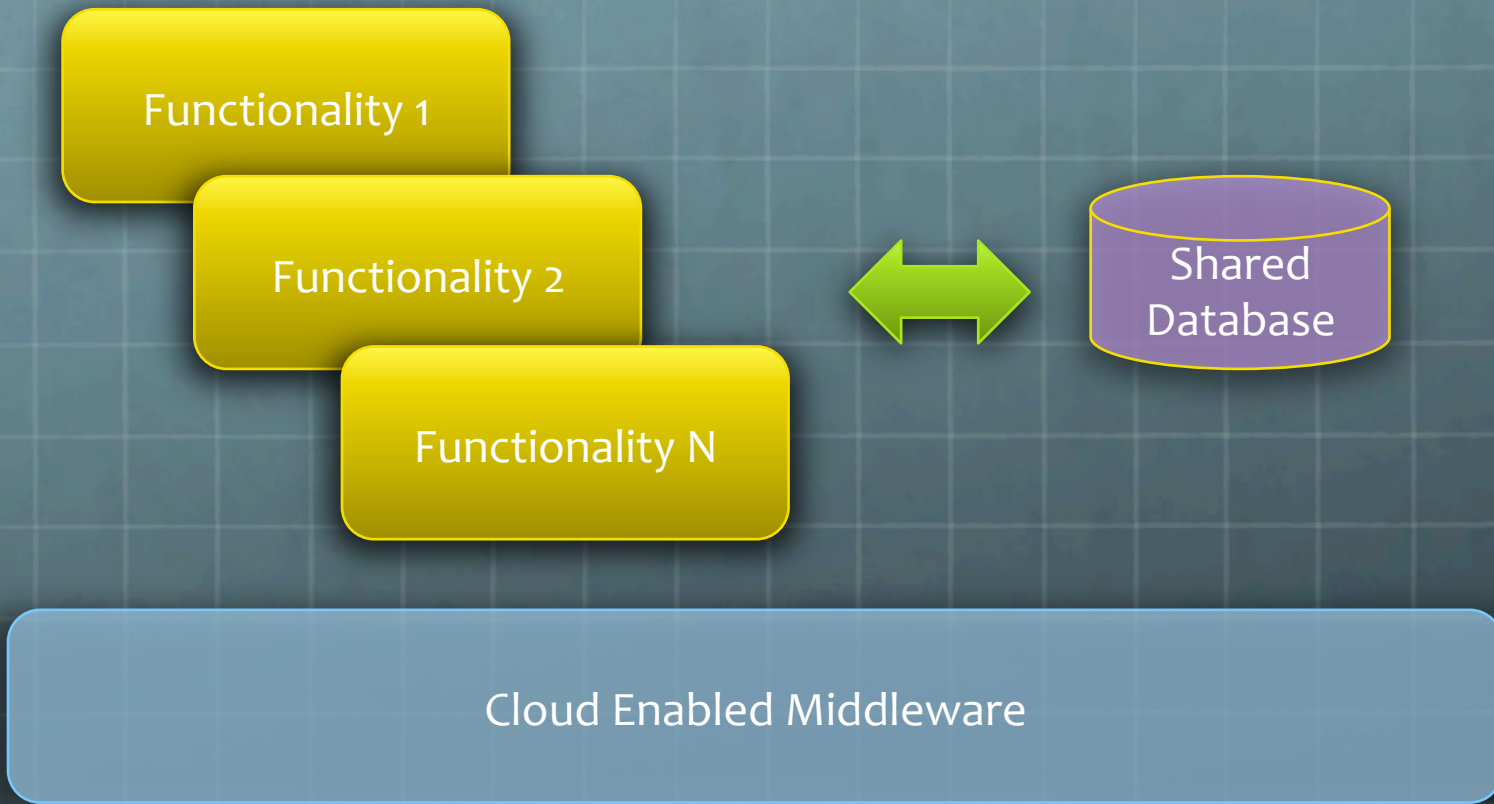
# **Modernizing HealthCare Applications with Micro Services**

**Edison Ting  
Pivotal Solutions Architect**

The screenshot displays the OpenEMR interface for a patient named Sal Goodman. At the top, the patient's name and date of birth (DOB: 1991-07-09, Age: 23) are shown. The current date is Monday, July 21, 2014. A calendar widget shows the current date highlighted. Below the calendar, there is a list of providers and a list of encounters. The encounters list shows a single encounter on 2014-07-21 for Sal Goodman, performed by Administrator Administrator. The interface includes a sidebar with navigation options like Patient/Client, Patients, New/Search, Summary, Visits, Create Visit, Current, Visit History, Records, Visit Forms, Import, Fees, Procedures, and Administration. A 'Billing Manager' window is open, showing criteria for generating bills (X12, CMS 1500 PDF, etc.). A 'Fee Sheet' window is also visible, showing search results for ICD9 Diagnosis, CPT4 Procedure/Service, and HCPCS Procedure/Service.

Health Electronic Medical Record tool OpenEMR provides a lot of functionality in one Monolithic Application

Monolithic architecture makes it difficult to manage, update and add new functionality



- 🌐 **Micro services architecture can help with manage-ability of distinct applications and services, and facilitate analytics driven model**
- 🌐 **Cloud enabled runtime can help with software lifecycle and application deployment and movement between infrastructures**

*OpenEMR*



Patient Name:

Reason for Visit:

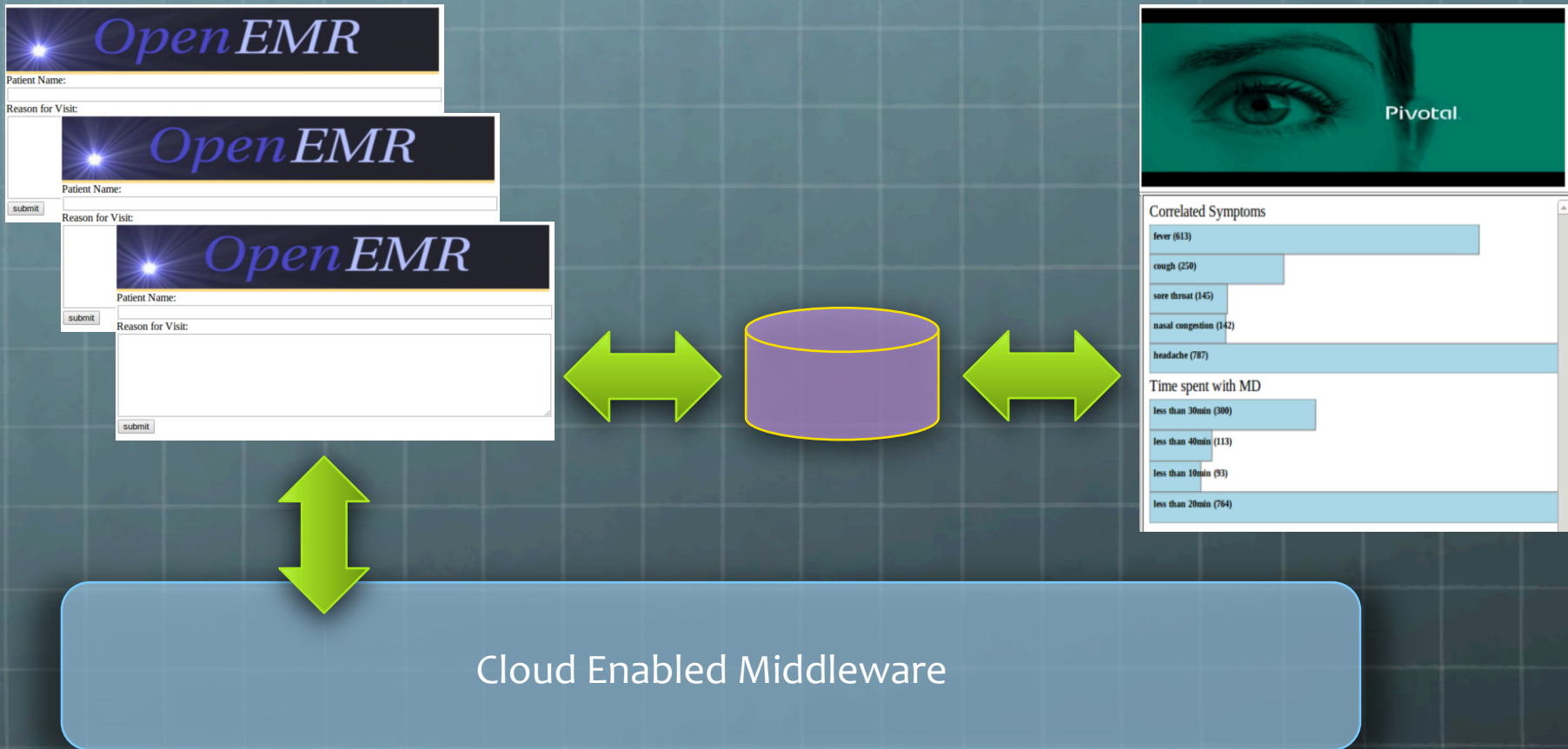
submit



Cloud Enabled Middleware

-  An patient portal application can be built separately that can service many users, such as allow patient themselves to schedule visits
-  Such applications can be managed and scaled independently across different instances, all sharing one central database





- 🌐 Shared patient information can then be analyzed globally to derive actionable insights
- 🌐 Live patient information can be correlated with historical data or public information to discover useful relationships between similar patients