Software Demonstration

Day 1 of the Provider Directory Workshop included a software demonstration designed to show how provider data can be updated by a 3rd party application using a RESTFul API, protected by OAuth2, in a FHIR format. Below is a list of the various components along with brief descriptions.

Software Components

oAuth2 and Write API Gateway Server: This server controls the Authorization Server, the Protected Resources (our updated APIs), and the API administration. It is a Django application making use of Django OAuth Toolkit. Running Demo | Source Code

oAuth2 Example Client: This sample client lets a user login and subsequently call a series of RESTFul APIs to update provider data. It is a Django application making use of python-social-auth. Running Demo | Source Code

Public Provider Registry and Read APIs: This application serves up data to humans and machines. The user interface provides simple NPPES search capabilities. NPPES and other types of provider data are available via API and there are numerous APIs available from this server. The demonstration presented a "PECOS API" that reports if a provider participates in Medicare and, if so, for which provider organizations. The demonstration included an example URL to demonstrate how the API works. Running Demo | Source Code

Provider Data Tools: This is a set of command line tools and libraries for manipulating provider data. It can break the NPPES data into smaller CSVs and convert the NPPES data into FHIR resource documents or ProviderJSON documents. It can also help import those data into a MongoDB database. See the README in the source code for more documentation. Source Code

Select Data Sources

- NPPES Data
- PECOS Provider Enrollment Data
- Charlie Ornstein's Tip Sheet on Medicare Datasets