**CMS-10558**

Information Collection for Machine Readable Data for Provider Network and Prescription Formulary Content for FFM QHPs
http://www.regulations.gov/#!documentDetail;D=CMS_FRDOC_0001-1669

- **Docket ID:**CMS_FRDOC_0001
- **Document Type:**Notice
- **Status:**Posted
- **Received Date:**Mar 30, 2015
- **Start-End Page:**16687 - 16688
- **Comment Start Date:**Mar 30, 2015
- **Comment Due Date:**May 29, 2015

**Submitted by**

David Portnoy
HHS IDEA Lab Entrepreneur-in-Residence
m: 312.401.0309 | g: portnoy.david@gmail.com

## Purpose

In regard to collection of information in the manner proposed, these comments are intended to

- Enhance the quality and utility of the data collected
- Enable automation and provide easier alternatives, thereby ultimately lead to lower collection burden
- Anticipate and accommodate for changes in the schema, reducing need for future PRA

## Comments

1. The “machine readable” requirement should be more explicitly defined as it pertains to the proposed schema. It should be stated that to meet this requirement, a file should pass an agreed upon schema **validator**. There’s already one configured for the propose QHP schema: https://github.com/adhocteam/qhp-validator.

2. Currently providers.json and drugs.json are missing the last_updated_on field. It’s best practice to include an updated on **date stamp** on all schemas. This is especially important given the monthly update requirement.

3. For future maintainability, add a field that identifies the exact version of the schema. Perhaps using **describedBy** field and **conformsTo** fields, as is done for data.gov’s Common Core Schema.

4. Without having **controlled vocabularies** specified for enumerated fields, the aggregated data would be very difficult to use in third party applications and analytics.
    a. Provider Specialty is a good example of a field that needs to be consistently defined. For example, it could use NPPES specialty taxonomy, Medicare specialty codes (used in claims), ABMS Specialty and Subspecialty Certificates, HealthVault Medical Specialties, Schema.org extension, etc.
    b. Same applies to many of the other fields: Provider type, pharmacy type, etc.
    c. Consider using the best practices employed by the government-wide data.gov Common Core Schema to attain globally unique field definitions. JASON-LD makes fully qualified definitions natural. But for this purpose, it could also be accomplished with standard JSON, using describedBy field and conformsTo fields.

5. For the sake of consistency and minimizing confusion and redundancy, consider using fields (and naming convention) already in use from "adjacent" domains. Examples:

    a. Consider adding the fields captured by **HIOS** and available through the Plan Finder API:
        1. Provider / Product Type: HMO, POS, PPO, HMO/POS, HMO/PPO or HMO/POS/PPO.
        2. Product ID
        3. Product name
        4. Issuer ID
        5. Issuer name
        6. Issuer state code

    Example use and naming convention

```
<PlanID>88380VA0900002</PlanID>
 <PlanNameText>Anthem HealthKeepers Bronze POS 4000 20</PlanNameText>
<ProductID>88380VA090</ProductID>
<ProductNameText>POS Off Exchange</ProductNameText>
<IssuerID>88380</IssuerID>
<IssuerNameText>HealthKeepers, Inc.</IssuerNameText>
<IssuerStateCode>VA</IssuerStateCode>
<IssuerTollFreeNumber>18557481810</IssuerTollFreeNumber>
<IssuerLocalNumber>18557481810</IssuerLocalNumber>
<IssuerTTYNumber xsi:nil="true" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
<ProviderType>POS</ProviderType>
```

    (Despite the fact that the schema used is XML, rather than JSON)

    b. Fields specified by **Medicare** for a Model Provider Directory, consider adding these:
        i. plan.json
            1. Description of plan's service area
            2. Customer service phone number
            3. Customer service hours of operation
            4. Network services: healthcare/vision/dental

ii. provider.json
    1. Provider type is defined more specifically: PCPs, Specialists, Hospitals, Skilled Nursing Facilities, Outpatient Mental Health Providers, Pharmacies (rather than Individual, Facility)
    2. Neighborhood for larger cities (optional)
    3. Provider website & email address (optional)
    4. Provider supports e-prescribing

6. Besides JSON, consider giving plans an option to provide their submission in an HTML with **microdata** format. The reason is that for some, it's advantageous to have both human and machine readable data in a single document, rather than needing to maintain synchronization between them. Webmasters might find microdata easier to work with than managing separate endpoints for JSON files. And microdata can still be validated and converted into JSON. (There are already many ways to extract JSON from microdata. For example, making an API call to http://rdf-translator.appspot.com/convert/microdata/json-ld/<source_URL>)

7. I propose implementing a proof of concept on the proposed schema with Medicare Advantage plans, as a way to more adequately assess the burden and schema effectiveness, as well as serving as a concrete example for QHPs to follow.