

## Appendix A


📄 CMSgov / QHP-provider-formulary-APIs

*No description, website, or topics provided.*

🔗 33 commits    🌿 3 branches    📦 0 packages    📄 0 releases    👤 3 contributors    📄 Unlicense

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 paulsmith Fix coinsurance option enum ...    Latest commit fa3cf82 on Aug 30, 2016

📄 data	Add GROUP provider type	4 years ago
📄 developer	Sample Issuer Site with index.	5 years ago
📄 LICENSE	initial checkin.	5 years ago
📄 README.md	Fix coinsurance option enum	4 years ago
📄 cms-data-index.json	Sample Issuer Site with index.	5 years ago
📄 index.html	Add index document readme and schema	5 years ago
📄 index_document.md	SADP don't have formulary urls	4 years ago
📄 index_document_schema.json	Dental insurers might not have formularies	4 years ago

📄 README.md

## Developer Documentation

Learn how to describe what providers and drugs are covered by a particular health plan.

### JSON

All information must be described in the JSON file format. JSON is a lightweight and simple way to represent machine-readable data. It is quickly becoming the de facto standard for shuttling data across the internet, fueled primarily by the rise of mobile and APIs. Modern programming languages can interpret and produce JSON out of the box.

[Learn about JSON >](#)

### Public Discoverability

Organizations must post their `index.json`, `plans.json`, `providers.json`, and `drugs.json` files on a website, accessible to the public.

The JSON URLs listed above *must* be provided over HTTPS to ensure the integrity of the data.

### Data types

All values in the JSON are strings, unless otherwise noted in the `definition` field.

Dates should be strings, in ISO 8601 format (e.g. YYYY-MM-DD).

### PRA DISCLOSURE:

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0938-1284. The time required to complete this information collection is estimated to average 136 hours per response for new QHP issuers and 64 hours per response for new SADP issuers in the first year, and 36 hours for returning QHP issuers and 18 hours for returning SADP issuers in the first year. These estimates include the time to review instructions, and complete and review the information collection. If you have comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: CMS, 7500 Security Boulevard, Attn: PRA Reports Clearance Officer, Mail Stop C4-26-05, Baltimore, Maryland 21244-1850. **\*\*\*CMS Disclosure\*\*\* Please do not send applications, claims, payments, medical records or any documents containing sensitive information to the PRA Reports Clearance Office. Please note that any correspondence not pertaining to the information collection burden approved under the associated OMB control number listed on this form will not be reviewed, forwarded, or retained. If you have questions or concerns regarding where to submit your documents, please contact Joshua Van Drei at [Joshua.VanDrei@cms.hhs.gov](mailto:Joshua.VanDrei@cms.hhs.gov).**

## Health Plans - plans.json

### Description

`plans.json` contains a list of health plans and their corresponding network of providers and formularies.

### Schema

Field	Label	Definition	Required
<code>plan_id_type</code>	ID Type	Type of Plan ID. For all Marketplace plans this should be: <code>HIOS-PLAN-ID</code>	Yes
<code>plan_id</code>	Unique Identifier	The 14-character, HIOS-generated Plan ID number. (Plan IDs must be unique, even across different markets.)	Yes
<code>marketing_name</code>	Marketing Name	The name of the plan as it is displayed on HealthCare.gov	Yes
<code>summary_url</code>	URL for Plan Information	The URL that goes directly to the summary of benefits and coverage for the specific standard plan or plan variation.	Yes
<code>marketing_url</code>	URL for Plan Information	The URL that goes directly to the plan brochure for the specific standard plan or plan variation.	No
<code>formulary_url</code>	URL for Formulary	The URL that goes directly to the formulary brochure for the specific standard plan or plan variation.	No
<code>plan_contact</code>	Contact Email Address for Plan	An email address for developers/public to report mistakes in the network and formulary data.	Yes
<code>network</code>	Network	Array of networks	Yes
<code>formulary</code>	Formulary	A list of formularies or a single formulary associated with this plan. Both a list of formularies or a single formulary are valid.	Yes
<code>benefits</code>	Benefits	Array of benefits	No
<code>last_updated_on</code>	Last Updated On	ISO 8601 format (e.g. YYYY-MM-DD)	Yes
<code>years</code>	Years	An array of years for which the plan is offered on the marketplace (eg., 2016, 2017).	Yes

### Network sub-type

This type defines a network within a plan. The values should be something that is meaningful to an issuer, there is no taxonomy of network tier names. This value will be used later in the `providers.json` file to connect a provider to a specific plan and network tier within that plan.

Field	Label	Definition	Required
<code>network_tier</code>	Network Tier	Tier name for network (Example Values: <code>PREFERRED</code> , <code>NON-PREFERRED</code> , etc. Values should be all uppercase. )	Yes

### Formulary sub-type

This type defines a formulary within a plan. The values should be something that is meaningful to an issuer, there is no taxonomy of formulary tier names. This value will be used later in the `drugs.json` file to connect a drug to a specific plan and formulary tier within that plan.

Field	Label	Definition	Required
<i>drug_tier</i>	Drug Tier	Tier for formulary - (Example Values: <code>GENERIC</code> , <code>PREFERRED-GENERIC</code> , <code>NON-PREFERRED-GENERIC</code> , <code>SPECIALTY</code> , <code>BRAND</code> , <code>PREFERRED-BRAND</code> , <code>NON-PREFERRED-BRAND</code> , <code>ZERO-COST-SHARE-PREVENTIVE</code> , <code>MEDICAL-SERVICE</code> , etc. Values should be all uppercase.)	Yes
<i>mail_order</i>	Mail Order	Does the formulary cover mail order? - (Values: <code>true</code> or <code>false</code> )	Yes
<i>cost_sharing</i>	Cost Sharing	Array of cost sharing values (see "Cost sharing sub-type" below)	No

#### Cost sharing sub-type

Field	Label	Definition	Required
<i>pharmacy_type</i>	Pharmacy Type	Pharmacy type (Example Values: <code>1-MONTH-IN-RETAIL</code> , <code>1-MONTH-OUT-RETAIL</code> , <code>1-MONTH-IN-MAIL</code> , <code>1-MONTH-OUT-MAIL</code> , <code>3-MONTH-IN-RETAIL</code> , <code>3-MONTH-OUT-RETAIL</code> , <code>3-MONTH-IN-MAIL</code> , <code>3-MONTH-OUT-MAIL</code> )	Yes
<i>copay_amount</i>	Copay amount	Amount of copay, in \$ (number)	Yes
<i>copay_opt</i>	Copay option	Qualifier of copay amount (Values: <code>AFTER-DEDUCTIBLE</code> , <code>BEFORE-DEDUCTIBLE</code> , <code>NO-CHARGE</code> , <code>NO-CHARGE-AFTER-DEDUCTIBLE</code> )	Yes
<i>coinsurance_rate</i>	Coinsurance rate	Rate of coinsurance (float, 0.0 to 1.0)	Yes
<i>coinsurance_opt</i>	Coinsurance option	Qualifier for coinsurance rate (Values: <code>AFTER-DEDUCTIBLE</code> , <code>BEFORE-DEDUCTIBLE</code> , <code>NO-CHARGE</code> , <code>NO-CHARGE-AFTER-DEDUCTIBLE</code> )	Yes

#### Benefits sub-type

The **Benefits** sub-type is an optional section and will be shaped depending on what industry and consumers find valuable.

For example, many health plans are offering telemedicine as an additional health benefit and that can be highlighted by adding a `telemedicine` entry.

Field	Label	Definition	Required
<i>telemedicine</i>	Offers Telemedicine	Does the plan cover telemedicine? Boolean (values should be either <code>true</code> or <code>false</code> )	No

#### Example plans.json

```
[
  {
    "plan_id_type": "HIOS-PLAN-ID",
    "plan_id": "12345XX9876543",
    "years": [2016, 2017],
    "marketing_name": "Sample Gold Health Plan",
    "summary_url": "http://url/to/summary/benefits/coverage",
    "marketing_url": "http://url/to/health/plan/information",
    "formulary_url": "http://url/to/formulary/information",
    "plan_contact": "email@address.com",
    "network": [
      {
        "network_tier": "PREFERRED"
      },
      {

```

```

        "network_tier": "NON-PREFERRED"
      }
    ],
    "formulary": [
      {
        "drug_tier": "BASIC",
        "mail_order": true,
        "cost_sharing": [
          {
            "pharmacy_type": "1-MONTH-IN-RETAIL",
            "copay_amount": 20.0,
            "copay_opt": "AFTER-DEDUCTIBLE",
            "coinsurance_rate": 0.10,
            "coinsurance_opt": "BEFORE-DEDUCTIBLE"
          },
          {
            "pharmacy_type": "1-MONTH-IN-MAIL",
            "copay_amount": 0.0,
            "copay_opt": "NO-CHARGE",
            "coinsurance_rate": 0.20,
            "coinsurance_opt": null
          }
        ]
      },
      {
        "drug_tier": "PREFERRED",
        "mail_order": true,
        "cost_sharing": [
          {
            "pharmacy_type": "1-MONTH-IN-RETAIL",
            "copay_amount": 20.0,
            "copay_opt": "AFTER-DEDUCTIBLE",
            "coinsurance_rate": 0.10,
            "coinsurance_opt": "BEFORE-DEDUCTIBLE"
          },
          {
            "pharmacy_type": "1-MONTH-IN-MAIL",
            "copay_amount": 0.0,
            "copay_opt": "NO-CHARGE",
            "coinsurance_rate": 0.20,
            "coinsurance_opt": null
          }
        ]
      }
    ],
    "last_updated_on": "2015-03-17"
  }
]

```

## Providers - providers.json

### Description

`providers.json` contains a list of providers and the plans that cover their services.

If a provider has more than one NPI number, please create separate entries for each NPI number. If there is no NPI number, set the value to null ( {"npi": null} )

### Schema

Field	Label	Definition	Required
npi	National Provider ID	The 10-digit National Provider Identifier (NPI) is a unique identification number for covered health care providers	Yes

Field	Label	Definition	Required
<b>type</b>	Type	One of: <code>INDIVIDUAL</code> , <code>FACILITY</code> , or <code>GROUP</code> . For reference, <code>INDIVIDUAL</code> maps to <code>NPI type 1</code> , while <code>FACILITY</code> and <code>GROUP</code> correspond with <code>NPI type 2</code> .	Yes
<b>plans</b>	Plans	Array of plans that cover this provider (see "Plans sub-type" below)	Yes
<b>last_updated_on</b>	Last Updated On	Date of when the record for this provider has been last updated or refreshed - ISO 8601 format (e.g. YYYY-MM-DD)	Yes

If the entry has `INDIVIDUAL` type, then the following fields should be present:

Field	Label	Definition	Required
<b>name</b>	Name	-	Yes
<b>prefix</b>	Prefix	One of <code>Mr.</code> , <code>Mrs.</code> , <code>Miss</code> , <code>Ms.</code> , <code>Dr.</code>	No
<b>first</b>	First Name	Full first name	Yes
<b>middle</b>	Middle Name	Full middle name	No
<b>last</b>	Last Name	Full last name	Yes
<b>suffix</b>	Suffix	One of <code>Jr.</code> , <code>Sr.</code> , <code>II</code> , <code>III</code> , <code>III</code> , <code>IV</code>	No
<b>addresses</b>	Address	List of addresses for this provider	Yes
<b>address</b>	Street Address	-	Yes
<b>address_2</b>	Street Address 2	-	No
<b>city</b>	City	-	Yes
<b>state</b>	State Abbreviation	Two letter state abbreviation (FL, IA, etc.)	Yes
<b>zip</b>	Zip Code	Five digit zip code, represented as a string	Yes
<b>phone</b>	Phone Number	Phone number for this address, represented as a string of numbers	Yes
<b>specialty</b>	Specialty Type	An array of specialty types. Free form text field.	Yes
<b>accepting</b>	Accepting Patients	Is the provider accepting new patients? One of three values: <code>accepting</code> , <code>not accepting</code> , <code>accepting in some locations</code>	Yes
<b>gender</b>	Gender	Values: <code>Male</code> , <code>Female</code> , <code>Other</code>	No
<b>languages</b>	Languages Spoken	An array of the languages spoken	No

If the entry has `FACILITY` type, then the following fields should be present:

Field	Label	Definition	Required
<b>facility_name</b>	Facility Name	-	Yes
<b>facility_type</b>	Facility Type	An array of facility types. Free-form text field.	Yes

Field	Label	Definition	Required
<i>addresses</i>	Address	List of addresses for this facility	Yes
<i>address</i>	Street Address	-	Yes
<i>address_2</i>	Street Address 2	-	No
<i>city</i>	City	-	Yes
<i>state</i>	State Abbreviation	Two letter state abbreviation (FL, IA, etc.)	Yes
<i>zip</i>	Zip Code	Five digit zip code, represented as a string	Yes
<i>phone</i>	Phone Number	Phone number for this address, string	Yes

If the entry has `GROUP` type, then the following fields should be present:

Field	Label	Definition	Required
<i>group_name</i>	Group Practice Name	-	Yes
<i>addresses</i>	Address	List of addresses for this facility	Yes
<i>address</i>	Street Address	-	Yes
<i>address_2</i>	Street Address 2	-	No
<i>city</i>	City	-	Yes
<i>state</i>	State Abbreviation	Two letter state abbreviation (FL, IA, etc.)	Yes
<i>zip</i>	Zip Code	Five digit zip code, represented as a string	Yes
<i>phone</i>	Phone Number	Phone number for this address, string	Yes

#### Plans sub-type

Field	Label	Definition	Required
<i>plan_id_type</i>	ID Type	Type of Plan ID. For all Marketplace plans this should be: <code>HIOS-PLAN-ID</code>	Yes
<i>plan_id</i>	Unique Identifier	The plan ID that was used in the <code>plans.json</code> as the <code>plan_id</code> value. For a Marketplace plan, this must be the 14-digit HIOS plan id.	Yes
<i>network_tier</i>	Network Tier	Tier for network (Example Values: <code>PREFERRED</code> , <code>NON-PREFERRED</code> , etc. Values should be all uppercase.) Must match a network tier defined in the corresponding plan record in a <code>plans.json</code> file.	Yes
<i>years</i>	Years	An array of years for which the plan is offered on the marketplace (eg., 2016, 2017).	Yes

#### Example providers.json

```
[
  {
    "npi": "1234567893",
    "type": "INDIVIDUAL",
    "name": {
      "first": "Sarah",
      "middle": "Maya",
      "last": "Ngyuen",
      "suffix": "Jr."
    },
    "addresses": [
      {
```

```

        "address": "123 Main St",
        "address_2": "Suite 120",
        "city": "Little Rock",
        "state": "AR",
        "zip": "72201",
        "phone": "2025551212"
    },
    {
        "address": "675 South St",
        "city": "Little Rock",
        "state": "AR",
        "zip": "72201",
        "phone": "2025551212"
    }
],
"specialty": ["Ophthalmology", "Endocrinology"],
"accepting": "accepting",
"plans": [
    {
        "plan_id_type": "HIOS-PLAN-ID",
        "plan_id": "12345XX9876543",
        "network_tier": "PREFERRED",
        "years": [2016]
    },
    {
        "plan_id_type": "HIOS-PLAN-ID",
        "plan_id": "12345XX9876543",
        "network_tier": "NON-PREFERRED",
        "years": [2016, 2017]
    }
],
"languages": ["English", "Spanish", "Mandarin"],
"gender": "Female",
"last_updated_on": "2015-03-17"
},
{
    "npi": "1234567894",
    "type": "FACILITY",
    "facility_name": "Main Street Hospital",
    "facility_type": ["Hospital", "Dialysis"],
    "addresses": [
        {
            "address": "123 Main St",
            "address_2": "Suite 120",
            "city": "Little Rock",
            "state": "AR",
            "zip": "72201",
            "phone": "2025551212"
        }
    ],
    "plans": [
        {
            "plan_id_type": "HIOS-PLAN-ID",
            "plan_id": "12345XX9876543",
            "network_tier": "PREFERRED",
            "years": [2017]
        },
        {
            "plan_id_type": "HIOS-PLAN-ID",
            "plan_id": "12345XX9876543",
            "network_tier": "NON-PREFERRED",
            "years": [2016]
        }
    ],
    "last_updated_on": "2016-04-13"
},
{
    "npi": "1234567895",
    "type": "GROUP",
    "group_name": "North Main Physicians Group",

```

```

"addresses": [
  {
    "address": "234 N Main St",
    "address_2": "",
    "city": "Fayetteville",
    "state": "AR",
    "zip": "72701",
    "phone": "2025551313"
  }
],
"plans": [
  {
    "plan_id_type": "HIOS-PLAN-ID",
    "plan_id": "12345XX9876543",
    "network_tier": "PREFERRED",
    "years": [2017]
  },
  {
    "plan_id_type": "HIOS-PLAN-ID",
    "plan_id": "12345XX9876543",
    "network_tier": "NON-PREFERRED",
    "years": [2016]
  }
],
"last_updated_on": "2016-05-31"
}
]

```

## Drugs - drugs.json

### Description

`drugs.json` contains a list of drugs and the plans that cover them.

### Schema

Field	Label	Definition	Required
<code>rxnorm_id</code>	Drug Identifier	RxCUI (Specific drug identifier from RXNORM)	Yes
<code>drug_name</code>	Drug Name	Name of Drug	Yes
<code>plans</code>	Plans	Array of plans that cover this drug (see "Plans sub-type" below)	Yes

### Plans sub-type

Field	Label	Definition	Required
<code>plan_id_type</code>	ID Type	Type of Plan ID. For all Marketplace plans this should be: <code>HIOS-PLAN-ID</code>	Yes
<code>plan_id</code>	Unique Identifier	The plan ID that was used in the plans.json as the <code>plan_id</code> value. For a Marketplace plan, this must be the 14-digit HIOS plan id.	Yes
<code>drug_tier</code>	Drug Tier	Tier for formulary (Example Values: <code>GENERIC</code> , <code>PREFERRED-GENERIC</code> , <code>NON-PREFERRED-GENERIC</code> , <code>SPECIALTY</code> , <code>BRAND</code> , <code>PREFERRED-BRAND</code> , <code>NON-PREFERRED-BRAND</code> , <code>ZERO-COST-SHARE-PREVENTIVE</code> , <code>MEDICAL-SERVICE</code> , etc. Values should be all uppercase.)	Yes
<code>prior_authorization</code>	Prior Authorization Required	Is prior authorization required? - (boolean value: <code>true</code> or <code>false</code> )	No



Field	Label	Definition	Required
<i>step_therapy</i>	Step Therapy Required	Is step therapy required? - (boolean value: true or false)	No
<i>quantity_limit</i>	Quantity Limit	Is there a quantity limit for this drug? - (boolean value: true or false)	No
<i>years</i>	Years	An array of years for which the plan is offered on the marketplace (eg., 2016, 2017).	Yes

### Example drugs.json

```
[
  {
    "rxnorm_id": "209459",
    "drug_name": "Acetaminophen 500 MG Oral Tablet [Tylenol]",
    "plans": [
      {
        "plan_id_type": "HIOS-PLAN-ID",
        "plan_id": "12345XX9876543",
        "drug_tier": "GENERIC",
        "prior_authorization": false,
        "step_therapy": false,
        "quantity_limit": false,
        "years": [2016, 2017]
      },
      {
        "plan_id_type": "HIOS-PLAN-ID",
        "plan_id": "12345XX9876546",
        "drug_tier": "GENERIC",
        "prior_authorization": false,
        "step_therapy": false,
        "quantity_limit": false,
        "years": [2016, 2017]
      }
    ]
  },
  {
    "rxnorm_id": "248656",
    "drug_name": "Azithromycin 500 MG Oral Tablet [Zithromax]",
    "plans": [
      {
        "plan_id_type": "HIOS-PLAN-ID",
        "plan_id": "12345XX9876543",
        "drug_tier": "GENERIC",
        "prior_authorization": false,
        "step_therapy": false,
        "quantity_limit": true,
        "years": [2016]
      },
      {
        "plan_id_type": "HIOS-PLAN-ID",
        "plan_id": "12345XX9876546",
        "drug_tier": "GENERIC",
        "prior_authorization": false,
        "step_therapy": false,
        "quantity_limit": false,
        "years": [2017]
      }
    ]
  }
]
```