

Java Script Object Notation (JSON) Validator and Troubleshooting Refresher

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Center for Consumer Information and
Insurance Oversight (CCIIO)

Open Q&A Series for States

- The monthly webinar series provide States with the opportunity to ask questions about the QHP Certification process, including QHP State review tools.
- The State webinar series will complement the Centers for Medicare & Medicaid Services' (CMS's) twice-weekly issuer QHP webinar series.
 - States are invited to attend and listen to issuer webinars.
- A listing of all State webinars can be found on the Registration for Technical Assistance Portal (REGTAP).
 - www.REGTAP.info
- States are encouraged to submit questions in advance of each webinar to CMS_FEPS@cms.hhs.gov.

Agenda

- JSON Validator and Troubleshooting Refresher
- Announcement
- Q&A

Announcements

JSON Validator and Troubleshooting Refresher

Introduction

- Today CMS would like to do a quick refresher on some of the troubleshooting and validation tools available for Issuer use when examining JSON data.
- Tools and tips CMS will cover for each stage of creating, validating and reviewing data:
 - Before import and validation: Schema Validation Tool
 - After import and validation: Coverage Validation Tool
 - On-Website data checking: Tips for using Chrome 'Inspect'

Schema Validation

Schema Validator

- Schema validator still available at <http://coverage-validator-beta.herokuapp.com/>.
 - Upload entire files to check against schema
 - OR
 - Copy-paste portions of files to check against schema
- Note:
 - After clicking ‘validate’, review may take a few minutes to display results, particularly at high traffic times.
 - When encountering warnings and errors, a “show more” option is available to display beyond the first few errors.
 - Warnings and errors being emailed daily have a limited text output per file validated, but more can be displayed here for self-service review without having to wait to clear earlier errors.
 - *Syntax errors cause validation to stop, and will not display any subsequent errors downstream in the file.



coverage-validator-beta.herokuapp.com

QHP, provider, and formulary coverage JSON validator

BETA

[Click here for more information](#) | [Try an example](#)

Validate a file

JSON schema

Plans

The schema of the JSON document to be validated.

Schema year

2017

The schema year of the JSON document to be validated.

Select file

Click 'validate' to review the selected file. Please note that validation may take several minutes.

Validate

Validate JSON Copy/Paste

JSON schema

Plans

The schema of the JSON document to be validated.

Schema Year

2017

The schema Year of the JSON document to be validated.

JSON

Paste in your JSON here.

Validate

Coverage Validator Tool

Coverage Validator Tool Functions

- Coverage validator at <https://cmsgov.github.io/coverage-inspector/index.html> allows self-service review of the following items:
 - Plan IDs per Health Insurance Oversight System (HIOS) ID
 - National Provider Identifier (NPI) lookup tool querying National Plan and Provider Enumeration System (NPPES)
 - RxNorm Concept Unique Identifier (RxCUI) lookup tool querying National Institutes of Health (NIH)/RxNav
 - Drug name (string) to show RxCUI and NIH's display Name
 - Provider name (string) with ZIP search to show NPI, and NPPES name, specialty, taxonomy
 - Drug coverage
 - Provider coverage

Coverage Validator: Plan IDs Per HIOS ID

Find plans for an issuer

Issuer ID

49046

Select plan year

2017

Find Plans

49046GA0420018, 49046GA0420022, 49046GA0420032, 49046GA0420037, 49046GA0420038, 49046GA0420040, 49046GA0420042, 49046GA0420044, 49046GA0420047, 49046GA0420048, 49046GA0420049, 49046GA0410014, 49046GA0410015, 49046GA0410017, 49046GA0410019, 49046GA0410020, 49046GA0410021, 49046GA0410022, 49046GA0410023, 49046GA0410024, 49046GA0410026, 49046GA0410027, 49046GA0410028, 49046GA0410029, 49046GA0410030, 49046GA0410031, 49046GA0410032, 49046GA0410033, 49046GA0410034, 49046GA0410035, 49046GA0410036, 49046GA0410037, 49046GA0410038, 49046GA0410039, 49046GA0410040, 49046GA0410041, 49046GA0410042, 49046GA0410043, 49046GA0410044, 49046GA0410045, 49046GA0410046, 49046GA0410047, 49046GA0410048, 49046GA0410049, 49046GA0410050, 49046GA0410051, 49046GA0410052, 49046GA0410053, 49046GA0410054, 49046GA0410055, 49046GA0410056, 49046GA0410057, 49046GA0410058, 49046GA0410059, 49046GA0410060, 49046GA0410061, 49046GA0410062, 49046GA0410063, 49046GA0410064, 49046GA0410065, 49046GA0410066, 49046GA0410067, 49046GA0410068, 49046GA0410069, 49046GA0410070, 49046GA0410071, 49046GA0410072, 49046GA0410073, 49046GA0410074, 49046GA0410075, 49046GA0410076, 49046GA0410077, 49046GA0410078, 49046GA0410079, 49046GA0410080, 49046GA0410081, 49046GA0410082, 49046GA0420004, 49046GA0420005, 49046GA0420006, 49046GA0420007, 49046GA0420008, 49046GA0420011, 49046GA0420012, 49046GA0420013, 49046GA0420014, 49046GA0420015, 49046GA0420016, 49046GA0420017, 49046GA0420019, 49046GA0420020, 49046GA0420021, 49046GA0420023, 49046GA0420024, 49046GA0420025, 49046GA0420026, 49046GA0420027, 49046GA0420028, 49046GA0420029, 49046GA0420030, 49046GA0420031, 49046GA0420033, 49046GA0420034, 49046GA0420035, 49046GA0420036, 49046GA0420039, 49046GA0420041, 49046GA0420043, 49046GA0420045, 49046GA0420046, 49046GA0420050, 49046GA0420051, 49046GA0610003, 49046GA0610004, 49046GA0420009, 49046GA0610005, 49046GA0610006, 49046GA0610007, 49046GA0610008, 49046GA0610009, 49046GA0610010, 49046GA0610011, 49046GA0610012, 49046GA0610013, 49046GA0610014, 49046GA0420010

Coverage Validator: NPI Lookup

Provider Lookup

NPI

1790913317

Lookup Provider

NPI

1790913317

Name

Dr. Sydnee S McElroy

Type

Individual

Accepting

unknown

Taxonomy

207Q00000X

Specialties

Family Practice

Coverage Validator: RxCUI Lookup

Drug Lookup

RxCUI

Lookup Drug

RxCUI

209459

Name

TYLENOL

Strength

500 mg

Route

Oral Pill

Full Name

Acetaminophen 500 MG Oral Tablet [Tylenol]



Coverage Validator: Drug Name Lookup

Drug Search

Drug Name

Tylenol

Search Drugs

RXCUI	Full Name
1046779	Acetaminophen 325 MG / Phenylephrine Hydrochloride 5 MG Oral Tablet [Tylenol Sinus Congestion and Pain Daytime]
1052645	Acetaminophen 500 MG / Diphenhydramine Hydrochloride 12.5 MG Oral Tablet [Tylenol Severe Allergy]
1092378	Acetaminophen 500 MG / Diphenhydramine Hydrochloride 25 MG Oral Tablet [Tylenol PM]
1243440	8 HR Acetaminophen 650 MG Extended Release Oral Tablet [Tylenol]
1738139	Acetaminophen 325 MG Oral Capsule [Tylenol]
209387	Acetaminophen 325 MG Oral Tablet [Tylenol]
209459	Acetaminophen 500 MG Oral Tablet [Tylenol]
602621	Acetaminophen 325 MG / Guaifenesin 200 MG Oral Tablet [Tylenol Chest Congestion]
707327	Acetaminophen 33.3 MG/ML Oral Solution [Tylenol]
731370	Acetaminophen 80 MG Chewable Tablet [Tylenol]
828555	Acetaminophen 32 MG/ML Oral Suspension [Tylenol]
828557	Acetaminophen 160 MG Chewable Tablet [Tylenol]
993837	Acetaminophen 300 MG / Codeine Phosphate 30 MG Oral Tablet [Tylenol with Codeine]

Coverage Validator: Provider Name Lookup

Provider Search

Zipcode

Provider Type

☒ Individual Provider

☐ Facility

Name

Search

NPI	Name	Specialties	Taxonomy
1790913317	Dr. Sydnee S McElroy	Family Practice	Family Medicine
1669480471	Patricia L McElroy	Speech Therapist	Speech-Language Pathologist
1235105545	John J McElroy	Orthopedic Surgery	Specialist
1013956861	JAMES A MCELROY	General Surgery	Surgery
1487621272	EDWIN A MCELROY JR	HEMATOLOGY/ONCOLOGY, INTERNAL MEDICINE	Internal Medicine · Hematology & Oncology
1043210537	LAURA A MCELROY	Nurse Practitioner	Nurse Practitioner
1578657797	Susan P McElroy Marcus MD	Internal Medicine Doctor, Primary Care Physician (PCP)	Internal Medicine

Coverage Validator: Drug Coverage Lookup

Drug Coverage

HIOS Plan IDs *

RxCUIs *

* for multiple values, separate with a comma

Check Coverage

HIOS Plan ID	Covered	Not Covered
33709PA0690001	197426	

Coverage Validator: Provider Coverage Lookup

Provider Coverage

HIOS Plan IDs *

Provider NPIs *

* for multiple values, separate with a comma

Check Coverage

HIOS Plan ID	Covered	Not Covered
31274WV0310001		1790913317



On-Site Data Validation

Using Chrome's 'Inspect' Tool

- Within Window Shopping, when testing provider and drug coverage against submitted JSON files, it is important to check what RxCUI or NPI is displayed.
- The browser Chrome includes a free 'Inspect' tool that is useful to determine.

Window Shopping with “Inspect”

- Start at <https://www.healthcare.gov/see-plans/> and enter information for test scenario up to the Provider/Drug search page shown below:

The screenshot shows the HealthCare.gov website interface. At the top, there's a navigation bar with 'HealthCare.gov', 'Individuals & Families', 'Small Businesses', 'Log in', and 'ESPAÑOL'. Below this is a blue header for '2017 health insurance plans & prices'. A progress bar shows steps: ZIP CODE, HOUSEHOLD, EXPECTED INCOME, SAVINGS ESTIMATE, TOTAL ESTIMATED YEARLY COSTS, DOCTORS, DRUGS & FACILITIES (current step), and REVIEW. The main content area has a dark blue background with white text. It says: 'Enter your doctors, medical facilities & prescription drugs to see if they're covered by each plan'. Below this, it explains: 'You save money by using doctors and facilities (like hospitals and pharmacies) in a plan's network -- and drugs it covers.' It then says: 'Search for and select your doctors, facilities, and prescription drugs below.' There's a note: 'When you compare plans, you'll see if your selected doctors and facilities are in a plan's network, and if your drugs are covered. You'll see all plans, even if your selections aren't covered. (Information on group practices will be available in the future.)' Another note: 'Information is provided by the Insurance companies. Some information may be out of date, and plans change which doctors and drugs are covered during the year. Check with your doctor and the insurance company before enrolling to make sure your doctors and drugs are covered.' At the bottom, there's a search bar with the placeholder text 'Enter ONE doctor, facility, or prescription drug at a time' and a green 'SEARCH' button. Below the search bar is a blue 'SKIP' button.

Window Shopping with “Inspect” (Continued)

- Right-click or secondary click to display the pop-up menu; select “Inspect”.



Window Shopping with “Inspect” (Continued)

- First: Within the “Inspect” pane, click “Network”.
- Next: Enter the search string (provider or drug) and click Search.

The screenshot shows the HealthCare.gov website on the left and the Chrome DevTools Network tab on the right. A red arrow points to the 'Network' tab in the DevTools toolbar. The website displays the '2017 health insurance plans & prices' section, with a search bar containing 'McElroy' and a 'SEARCH' button. The DevTools Network tab shows a list of requests, with the first two requests highlighted. The first request is 'ping?h=h...' and the second is 'ping?h=h...'. The table below shows the details of these requests.

Name	S...	T...	Inti...	...	T...	Waterfall	...	...
ping?h=h...	2...	gf	Other	2...	1...			
ping?h=h...	2...	gf	Other	2...	1...			

2 requests | 426 B transferred

Console | What's New x

Highlights from Chrome 59 update

CSS and JS code coverage
Find unused CSS and JS with the new Coverage drawer.

Full-page screenshots
Take a screenshot of the entire page, from the top of the viewport to the bottom.

Block requests

Window Shopping with “Inspect” (Continued)

- First: On the process Name panel, find the search process and click it.
- Next: Expand the providers results next to it to see the NPI for each displayed search result.

The image shows a CMS search results page on the left and a network inspector on the right. A red arrow points from the 'search?q=McElroy&zipcode=...' entry in the network inspector to the 'SELECT' button for SYDNEE S MCELROY on the search results page.

Search Results Page (Left):

Search for: **McElroy** [SEARCH]

Results for MCELROY: Your doctors, medical facilities & prescription drugs

Doctors:

Doctor Name	Specialty	Address	Distance	Action
SYDNEE S MCELROY Family Medicine Family Practice		Huntington, WV 25701 (0.00 Miles Away)		SELECT
PATRICIA L MCELROY Speech-Language Pathologist Speech Therapist		Charleston, WV 25314 (41.05 Miles Away)		SELECT
JOHN J MCELROY Surgeon Orthopedic Surgery		Parlonsburg, WV 26101 (75.14 Miles Away)		SELECT
JAMES A MCELROY Surgeon General Surgery		SELFRIDGE, OH 45714 (78.31 Miles Away)		SELECT

Network Inspector (Right):

Filter: [XHR] [JS] [CSS] [img] [Media] [Font] [Doc] [WS] [Manifest] [Other]

Timeline: 0000 ms, 10000 ms, 20000 ms, 30000 ms, 40000 ms, 50000 ms, 60000 ms

Selected Request: **search?q=McElroy&zipcode=...**

Response:

```
{
  "providers": [
    {
      "address": {
        "street": "1000 Medic",
        "distance": 0
      },
      "provider": {
        "npi": "1250013317",
        "name": "..."
      }
    },
    {
      "address": {
        "street": "1015 Dekhu",
        "distance": 41.649670000000004
      },
      "provider": {
        "npi": "16494000471",
        "name": "..."
      }
    },
    {
      "address": {
        "street": "1000 Marle",
        "distance": 75.140076650000004
      },
      "provider": {
        "npi": "1235185545",
        "name": "..."
      }
    },
    {
      "address": {
        "street": "803 FARSON",
        "distance": 78.385110000000004
      },
      "provider": {
        "npi": "1013950001",
        "name": "..."
      }
    },
    {
      "address": {
        "street": "675 HIGHWA",
        "distance": 97.800000000000004
      },
      "provider": {
        "npi": "1487621272",
        "name": "..."
      }
    },
    {
      "address": {
        "street": "3290 Eagle",
        "distance": 108.111397000000004
      },
      "provider": {
        "npi": "1250013317",
        "name": "..."
      }
    }
  ]
}
```

Window Shopping with “Inspect” (Continued)

- Tips for using the Inspect results:
 - Numbering starts at zero (0), not one (1), so when troubleshooting issuer must match each result to the NPI record that falls with it in order (see arrows showing providers matched to their NPI).
 - Taking a screenshot here to show NPI or RxCUI is helpful when comparing plan results’ coverage of providers and drugs.
 - Prior to submitting a help ticket, issuers can utilize this method to ensure that the NPI or RxCUI that issuers are reporting issues with is truly the one (1) issuers are seeing as “Covered” or “Not Covered”, “In Network” or “Out of Network”.

The screenshot displays a search interface on the left and an 'Inspect' tool on the right. The search interface shows results for 'McElroy' with two providers listed: SYDNEE S MCELROY (Family Medicine) and PATRICIA L MCELROY (Speech-Language Pathologist). Red arrows point from these providers to their respective JSON data in the 'Inspect' tool. The 'Inspect' tool shows a list of requests with columns for Name, Headers, Preview, Response, and Timing. The 'Preview' column for the selected requests shows JSON data containing provider information, including NPI, name, address, and distance.

Search Results for MCELROY:

- Doctors**
- SYDNEE S MCELROY**
Family Medicine
Family Practice
Huntington, WV 25701 (0.00 Miles Away)
- PATRICIA L MCELROY**
Speech-Language Pathologist
Speech Therapist
Charleston, WV 25314 (41.65 Miles Away)

Inspect Tool Data:

Name	Headers	Preview	Response	Timing
ping?n=healthcare.gov&p=%...			<pre>{ "providers": [{...}, {...}, {...}, {...}, {...}, {...}, {...}, {...}, {...}, {...}, {...}, {...}], "drugs": []}</pre>	
ping?n=healthcare.gov&p=%...			<pre>{ "providers": [{...}, {...}, {...}, {...}, {...}, {...}, {...}, {...}, {...}, {...}, {...}, {...}]</pre>	
ping?n=healthcare.gov&p=%...			<pre>0: {...} address: {street1: "1600 Medical Center Drive", street2: "Suite 1500", city: "Huntington", state: "WV", distance: 0} provider: {npi: "1790913317", name: "Sydnee S McElroy", provider_type: "Individual", addresses: null,...}</pre>	
ping?n=healthcare.gov&p=%...			<pre>1: {...} address: {street1: "1015 Oakhurst Drive", street2: "", city: "Charleston", state: "WV", zipcode: "25314", distance: 41.64967088829274} provider: {npi: "1669488471", name: "Patricia L McElroy", provider_type: "Individual", addresses: null,...}</pre>	
ping?n=healthcare.gov&p=%...			<pre>2: {...} address: {street1: "1600 Murdoch Avenue", street2: "Suite 100", city: "Parkersburg", state: "WV", distance: 75.14087665052115} provider: {npi: "1235105545", name: "John J McElroy", provider_type: "Individual", addresses: null, pla...</pre>	
collect?v=1&_v=568a=15850...				
search?q=McElroy&zipcode=...				
ping?n=healthcare.gov&p=%...				
ping?n=healthcare.gov&p=%...				
ping?n=healthcare.gov&p=%...				
5a79be86db?a=525304438s...				

Questions

Please help us provide an accurate response by identifying your State when asking a question.

To submit or withdraw questions by phone:

- To submit a question, dial 'star(*) pound(#)' on your phone's keypad.
- To withdraw a question, dial 'star(*) pound(#)' on your phone's keypad.

To submit questions by webinar:

- Type your question in the text box under the 'Q&A' tab and click 'Send.'

If you are not able to ask your question during today's session, or if your question is best answered by subject matter experts (SMEs) outside Plan Management (PM), you may submit it via CMS_FEPS@cms.hhs.gov with the subject line "State Question."

State Regulators Webinar Session Survey

- CMS welcomes your feedback regarding this webinar series and values any suggestions that will allow us to enhance this experience for you.
- Shortly after this call, we will send a link to you for a convenient way to submit any ideas or suggestions you wish to provide that you believe would be valuable during these sessions.
- Please take time to complete the survey and provide CMS with any feedback.



Closing Remarks