**SUPPLEMENT   
  
CAMH-KGRID. Fall 2023.**

**USING ShEx VALIDATOR for FHIR RDF Validation**

**BEFORE STARTING WITH ShEx VALIDATION, SEE:**[**https://shex.io/**](https://shex.io/)

[**https://github.com/shexjs/shex.js**](https://github.com/shexjs/shex.js)

[**https://pmc.ncbi.nlm.nih.gov/articles/PMC10841909/**](https://pmc.ncbi.nlm.nih.gov/articles/PMC10841909/)

**After Downloading ShEx.js**

**STEP 1: Set PATH**

export PATH="$PATH:/…/shex.js/packages/shex-cli/bin"

**STEP 2: Run Validate Command**

validate --human -x /…/ShExValidation/fhir\_rdf\_validation/ShExSchemas/R5Plus/Organization.shex --diagnose -S <http://localhost:8088/validate>

**STEP 3: Example of Validating FHIR Data with this Command**

curl -i http://localhost:8088/validate

-F "data=@/.../ShExValidation/fhir\_rdf\_validation/FHIR\_RDF\_Examples/R5/file\_to\_be\_validated"   
  
-F   
"queryMap={FOCUS fhir:nodeRole fhir:treeRoot}@<Organization>"

EX:

curl -i <http://localhost:8088/validate> -F"data=@/Users/ajf/Desktop/71323f/ShExValidation/fhir\_rdf\_validation/FHIR\_RDF\_Examples/R5/account-example.ttl"   
-F"queryMap={FOCUS fhir:nodeRole fhir:treeRoot}@<Account>"

TESTON: Sept 28, 2023  
  
EX RESOURCE:

@prefix fhir: <http://hl7.org/fhir/> .

@prefix owl: <http://www.w3.org/2002/07/owl#> .

@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .

@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .

# - resource -------------------------------------------------------------------

[a fhir:Observation ;

fhir:nodeRole fhir:treeRoot ;

fhir:id [ fhir:v "eye-color"] ; #

fhir:text [

fhir:status [ fhir:v "generated" ] ;

fhir:div "<div xmlns=\"http://www.w3.org/1999/xhtml\"><p><b>Generated Narrative: Observation</b><a name=\"eye-color\"> </a></p><div style=\"display: inline-block; background-color: #d9e0e7; padding: 6px; margin: 4px; border: 1px solid #8da1b4; border-radius: 5px; line-height: 60%\"><p style=\"margin-bottom: 0px\">Resource Observation &quot;eye-color&quot; </p></div><p><b>status</b>: final</p><p><b>code</b>: eye color <span style=\"background: LightGoldenRodYellow; margin: 4px; border: 1px solid khaki\"> ()</span></p><p><b>subject</b>: <a href=\"patient-example.html\">Patient/example</a> &quot;Peter CHALMERS&quot;</p><p><b>effective</b>: 2016-05-18</p><p><b>value</b>: blue</p></div>"

] ; #

fhir:status [ fhir:v "final"] ; #

fhir:code [

fhir:text [ fhir:v "eye color" ]

] ; #

fhir:subject [

fhir:reference [ fhir:v "Patient/example" ]

] ; #

fhir:effective [ fhir:v "2016-05-18"^^xsd:date] ; #

fhir:value [ fhir:v "blue"]] . #

# -------------------------------------------------------------------------------------

RESOURCE ABOVE PASSED VALIDATION