

# Evaluation of HealthData.gov Platform (HDP) on the Semantic Web RDF Data Sets

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**Abstract.** Evaluation of HealthData.gov Platform (HDP) on the Semantic Web RDF Data Sets

**Keywords:** RDF Validation, RDF Constraints, DDI-RDF Discovery Vocabulary, Disco, RDF Data Cube Vocabulary, Linked Data, Semantic Web

## 1 Data Model Consistency

	Constraints										
Data Sets											
	DATA-MODEL-CONSISTENCY-01	DATA-MODEL-CONSISTENCY-02	DATA-MODEL-CONSISTENCY-03	DATA-MODEL-CONSISTENCY-04	DATA-MODEL-CONSISTENCY-05	DATA-MODEL-CONSISTENCY-06	DATA-MODEL-CONSISTENCY-07	DATA-MODEL-CONSISTENCY-08	DATA-MODEL-CONSISTENCY-09	DATA-MODEL-CONSISTENCY-10 (!)	DATA-MODEL-CONSISTENCY-11
<a href="http://healthdata.tw.rpi.edu/sparql">http://healthdata.tw.rpi.edu/sparql</a>	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓

Table 1: Evaluation of <http://healthdata.tw.rpi.edu/sparql>

## 2 Existential Quantifications

	Constraints			
	EXISTENTIAL-QUANTIFICATIONS-01	EXISTENTIAL-QUANTIFICATIONS-02	EXISTENTIAL-QUANTIFICATIONS-03	EXISTENTIAL-QUANTIFICATIONS-04
Data Sets	<a href="http://healthdata.tw.rpi.edu/sparql">http://healthdata.tw.rpi.edu/sparql</a>	✓	✓	✓

Table 2: Evaluation of *http://healthdata.tw.rpi.edu/sparql*

### 3 Cardinality Restrictions

Data Sets	Constraints
<a href="http://healthdata.tw.rpi.edu/sparql">http://healthdata.tw.rpi.edu/sparql</a>	<div>MINIMUM-QUALIFIED-CARDINALITY-RESTRICTIONS-02</div> <div>MAXIMUM-QUALIFIED-CARDINALITY-RESTRICTIONS-01</div> <div>EXACT-UNQUALIFIED-CARDINALITY-RESTRICTIONS-01</div> <div>EXACT-QUALIFIED-CARDINALITY-RESTRICTIONS-02</div>
	✓ ✓ ✓ ✓

Table 3: Evaluation of <http://healthdata.tw.rpi.edu/sparql>

## 4 Structure

Data Sets	Constraints	
	<i>STRUCTURE-01</i>	<i>STRUCTURE-02</i>
<i>http://healthdata.tw.rpi.edu/sparql</i>	✓	✓

Table 4: Evaluation of *http://healthdata.tw.rpi.edu/sparql*

## 5 Further Constraints