Non-Patient Instance (NPI) Storage RESTful Service
This supplement defines a RESTful Web Service allowing a client to store, retrieve, and search for Non-Patient Instances (NPI) from a server. NPIs are composite IODs that are not related to patients.

Examples are:

- Color Palettes
- Hanging Protocols
- Implant Templates
- Protocol Definitions

Images of phantoms, QC targets, doorknob swab photos, etc., are not NPIs. They are expected to be handled as pseudo-patients, because they incorporate the patient/study hierarchy.
Goals

• Create a RESTful service that can Store, Retrieve, and Search for NPI Instances
• Use the RS Studies Service as a model for the transactions, and try to deviate as little as possible.
The URI Template for NPI Resources is:

/\{npi-name\}\{/uid\}

Where

npi-name = "color-palette"
   =/ "hanging-protocol"
   =/ "implant-template"
   =/ ...

uid = dicom-uid
Acceptable Media Type and Character Set

accept-qp  = "accept=" media-type
charset-qp = "charset=" charset

The Accept Query Parameters may be used by all transactions.

Search

match*  = (attribute = value)*
include  = attribute*
page     = "offset" = uint
           /= "limit" = uint

The Search Query Parameters may only be used with the Search Transaction.
Retrieve Capabilities

Retrieves the Capabilities Description document from the origin server.

Retrieve

GET /{type}/{uid} {?accept-parameters*}

Retrieves a single NPI Instance

Store

POST /{type}{/uid} {?accept-parameters*}

Stores one or more NPI Instances

Search

POST /{type}?{?accept-parameters*} {?search-parameters*}

Searches for matching NPI Instances.
Similarities

- Same transactions, except no NPI Retrieve Rendered
- Same Query Parameters
- Both can store multiple instances

Differences

- Target Resources: NPI vs Studies
- Resource Hierarchy flat vs tree structured
- Search Attributes
- Retrieve single instance vs multiple instances
The NPI Service only supports DICOM Media Types:

- application/dicom    required
- application/dicom+json default
- application/dicom+xml  optional