

# Connectathon Doc Sharing testing -- 3 XDS Affinity Domains

At IHE Connectathons in both Europe and North America, we define three Affinity Domains. These represent three different document sharing healthcare communities.

## Patient IDs:

- Each Affinity Domain has its own (different) assigning authority for Patient IDs (eg ...20.1000, ...20.2000, ...20.3000)
- For ease-of-reference, we call these the ‘**blue**’, ‘**red**’, and ‘**green**’ domains. This is illustrated on the next slide.
- Each XDS.b Document Registry and XCA/XCA-I Gateway is assigned to one of these 3 domains ***for the week***. See later slides for details on assignments for the current Connectathon

## Affinity domain codes for metadata:

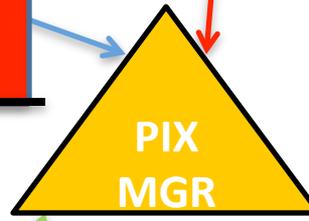
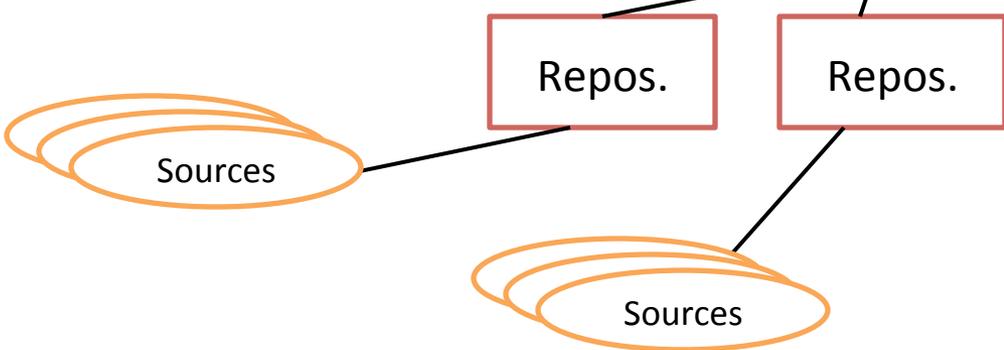
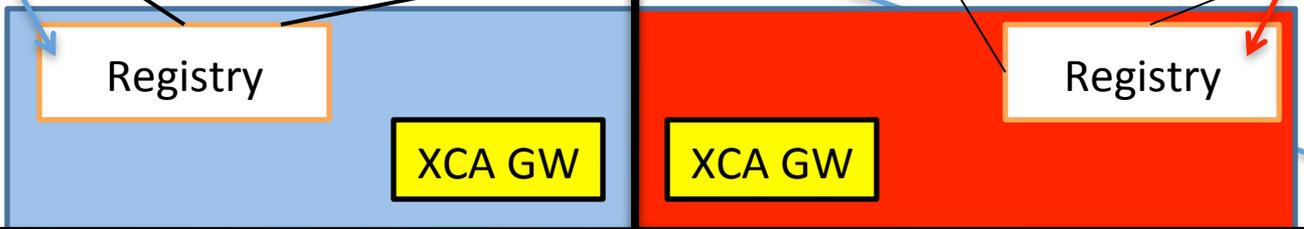
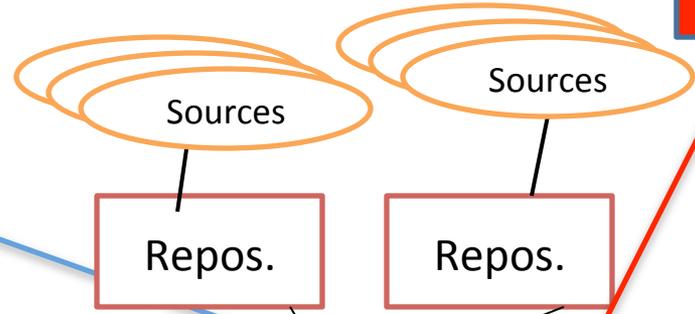
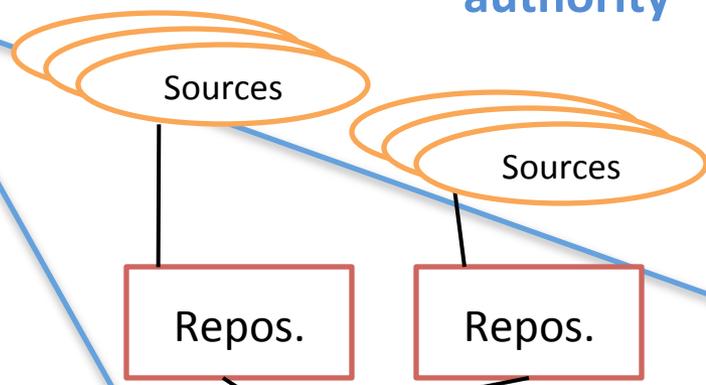
- The codes for (from codes.xml in the NIST XDS toolkit) are the ***same*** across all 3 affinity domains
- More information on codes for document sharing metadata:  
<https://gazelle.ihe.net/content/connectathon-affinity-domain-metadata>

1.3.6.1.4.1.21367.13.20.3000 assigning authority

1.3.6.1.4.1.21367.13.20.1000 assigning authority

Patient ID feed

Patient ID feed



1.3.6.1.4.1.21367.13.20.2000 assigning authority

# Three Assigning Authority - effect on XDS actors

- **XDS.b Registries:**
  - A given Registry is assigned only one of assigning authority value. It only accepts Patient Feeds and Documents with Patient IDs from this Assigning Authority. This value remains the same for the whole week.
  - Eg, we had **~30 Registries at a previous Connectathon**, so ten of the Registries were assigned to accept a Patient ID with the ...20.1000 value, yten are assigned the ... 20.2000 value, etc. A similar model will be followed for other Connectathons.
- **XDS.b Repositories:**
  - A Repository shouldn't care if it has stored documents for patients with different assigning authority values; the Repository can keep its database of documents and be paired with different Registries during the week with no adverse effect.
- **XDS.b Sources & Consumers / XDS-I.b & XCA-I Img Doc Source & Consumer:**
  - During Connectathon week, the burden for keeping track of multiple assigning authority domains lies here.
  - Sources will have to pay close attention to Assigning Authority of the Registry associated with the Doc Repository to which they are submitting a document. The Patient ID in the document metadata must contain the Assigning Authority for your Registry
  - Consumers will have to know the Assigning Authority value of the Registry it is querying.

# Three Assigning Authority – effect on HL7 actors

- **XDS.b Registries:**
  - For tests driven by XDS.b and XDS-I.b, we will use the Gazelle [PatientManager](#) tool to serve as the Patient Identity Source (HL7v2 or v3); it is able to send demographics containing a Patient ID with red, blue, green assigning authority to each Registry.
- **PIX/PIXv3 Managers:**
  - Will receive a feed for all patients created by the same Patient Identity Source (Gazelle PatientManager tool) used for XDS.b testing (including red, blue, green assigning authority values), as well as from vendors' Patient Identity Source actors.
- **PIX\* Consumers:**
  - Are already required to specify the affinity domain in their PIX Query; they may optionally specify 'what domain returned', to query a PIX Manager for a Patient ID in the domain they want
- **PDQ\* Suppliers:**
  - Many PDQ Suppliers will be able to store & respond to queries for Patient IDs from multiple affinity domains. If yours can only handle IDs from one domain, you can choose to participate in Red, Blue or Green, or the Assigning Authority OID given to you in gazelle..
- **Gazelle Patient Manager tool:**
  - **\*\*Any\*\*** test system can receive an HL7v2 or v3 feed from this tool. The tool also responds to PIX\* or PDQ\* queries.
  - More details on a later slide...

# Three Assigning Authority : XCA, XCPD, XCDR, XCA-I

- **Initiating and Responding Gateways:**
  - Connectathon Monitors assigned to these profiles will help Gateways “plug in” to this 3-affinity-domain infrastructure
  - Each Gateway is assigned to a Red, Green, or Blue community
  - This **\*\*does not\*\*** mean that your Gateway must interact with an XDS Registry/Repository infrastructure
  - Those Gateways that support the ‘XDS affinity domain’ option can be associated with one of the Red, Green, or Blue XDS Registries
  - Gateways can pre-load patient demographics (see upcoming slide). They can either learn about patients by accepting a Patient ID feed, or they will do it some other non-IHE way.

# Sample: Assigning Authorities for XDS.b Registry and XC\* Gateways

XDS.b Document Registries		Patient ID Assigning Authority to accept in your HL7v2 or v3 feed
<b>ALERT</b>	<b>OTHER_ALERT</b>	1.3.6.1.4.1.21367.13.20.1000
<b>CareEvolution</b>	<b>OTHER_CareEvolution</b>	
	<b>etc..</b>	
<b>Allscripts</b>	<b>OTHER_Allscripts_Helios</b>	1.3.6.1.4.1.21367.13.20.3000
<b>Carefx</b>	<b>XDSb_REG_Carefx</b>	
	<b>etc...</b>	
<b>Axlotl</b>	<b>XDSab_REG_Ax</b>	1.3.6.1.4.1.21367.13.20.2000
<b>CSH</b>	<b>PACS_CSH_0</b>	
	<b>etc...</b>	

**Registry & Gateway domain assignments for the most recent Connectathon are kept here:**

<https://docs.google.com/spreadsheets/d/1tpERxrijgOzOaHotAUbl2KSOLkb30Rqwmfi5iAlMewd0/edit?usp=sharing>

# Connectathon patient demographics (pre-loaded)

**We distribute patient demographics prior to IHE Connectathons to be pre-loaded on XDS.b Registry, XC\* Gateway, PDQ Supplier and PIX Manager systems**

- Each patient has name, date of birth, and address, plus a Patient ID value for each of the 3 assigning authorities – **red**, **blue**, and **green**.
- **PIX Managers** load all demographics (red, blue, **and** green) The PIX Managers should recognize these as the same person.
- **PDQ Suppliers** load all demographics for their assigning authority (red, **or** blue, **or** green)
- **XDS.b Registries & XC\* Gateways** load all demographics for their assigning authority (red, **or** blue, **or** green).

**These demographics are available in the Gazelle PatientManager tool.**

**See next slide.**

# Patient Demographics (pre-load & on-demand)

## The PatientManager tool

- The PatientManager tool is pre-loaded with patient demographics that need to be pre-loaded onto the actors identified on the previous slide. This enables connectathon test systems to receive these ‘pre-load’ demographics via an HL7v2 or v3 feed, or via FHIR Patient Resources..
- This tool can also be used to create new & send new patients before and during the Connectathon
- This tool is here: <https://gazelle.ihe.net/PatientManager/home.seam>
- We have a pre-Connectathon test containing instructions for pre-loading patients; see test 11300:  
<https://gazelle.ihe.net/content/11300-load-connectathon-test-patients>