

IHE Change Proposal

Tracking information

IHE Domain:	IT Infrastructure
Change Proposal ID:	CP-ITI-1322
Change Proposal Status:	Assigned
Date of last update:	April 29, 2025
Person assigned:	Alessia Favero

Change Proposal Summary Information

XCA federation of MHDS community	
Submitter's Name(s) and email address(es):	Alessia Favero - afavero@consorzioarsenal.it
Submission Date:	xx-04-2025
Profile(s) affected:	Cross-Community Access (XCA), Cross-Community Patient Discovery (XCPD)
Actor(s) affected:	Responding Gateway
IHE Technical Framework or Supplement modified:	IHE IT Infrastructure (ITI) Technical Framework, Revision 20.0, August 4, 2023
Volume(s) and Section(s) affected:	Volume 1, Section 18.2.3, Section 18.2.3.3, Section 27.2.3, Section 1.50.60.3, Section 1.50.60.3.1, Section 1.50.60.3.2, Section 1.50.60.3.3
Detailed Rationale for Change: In the introduction at Section 18 of the Cross-Community Access Profile is explicit that: The Cross-Community Access Profile supports the means to query and retrieve patient relevant medical data held by other communities. [...]. Such communities may be XDS Affinity Domains which define document sharing using the XDS Profile or any other communities, no matter what their internal sharing structure. Also, in the introduction at Section 27 of the Cross-Community Patient Discovery is explicit that: The Cross-Community Patient Discovery (XCPD) Profile supports the means to locate communities that hold patient relevant health data and the translation of patient identifiers across communities holding the same patient's data. [...]. Such communities may be XDS Affinity Domains which define document sharing using the XDS Profile or any other communities, no matter what their internal sharing structure. Given that such other communities could be MHDS communities, it would therefore be useful to consider the coupling of the Responding Gateway with an MHD Document Consumer in order to make it able to perform MHD queries, thus allowing an MHDS community to federate. Also, it would be useful to consider the coupling of the Responding Gateway with a Patient Demographics Consumer in order to make it able to respond to XCPD queries.	

Proposed Change(s)

Update Section 18.2.3 Grouping Rules by the following:

18.2.3 Grouping Rules

Grouping with a Document Consumer is used in situations where an Initiating Gateway and/or Responding Gateway are supporting an XDS Affinity Domain.

When an Initiating Gateway is supporting an XDS Affinity Domain, it can choose to query and retrieve from local actors in addition to remote communities. This is accomplished by grouping the Initiating Gateway with a Document Consumer Actor. This grouping allows Document Consumers such as EHR/PHR/etc. systems to query the Initiating Gateway to retrieve document information and content from both the local XDS Affinity Domain as well as remote communities. For details see Section 18.2.3.1. An Initiating Gateway that is not grouped with a Document Consumer is only able to return results from remote communities, so local EHR/PHR/etc. systems (Document Consumer Actors) must direct separate query and document retrieve transactions internally and externally.

When a Responding Gateway is supporting an XDS Affinity Domain, it may resolve Cross Gateway Query and Cross Gateway Retrieve Transactions by grouping with a Document Consumer and using the Registry Stored Query and Retrieve Document Set transactions. For details see Section 18.2.3.2

Grouping with a MHD Document Consumer is used in situations where a Responding Gateway belongs to a community which defines document sharing using the MHD Profile, that is an MHDS community.

When a Responding Gateway belongs to an MHDS community, it may resolve Cross Gateway Query and Cross Gateway Retrieve transactions by grouping with an MHD Document Consumer and using the Find Document Lists, Find Document References and Retrieve Document transactions. For details see Section 18.2.3.3

Add Section 18.2.3.3 Responding Gateway grouped with MHD Document Consumer with the following:

18.2.3.3 Responding Gateway grouped with MHD Document Consumer

Responding Gateways that are grouped with an MHD Document Consumer:

- shall initiate a Find Document Lists [ITI-66] transaction to a local MHD Document Responder to query local information in response to a received Cross Gateway Query [ITI-38]. The MHD Document Responder response must be augmented with the homeCommunityId of the Responding Gateway's community prior to returning in the response to the Cross Gateway Query.
- shall initiate a Find Document References [ITI-67] transaction to a local MHD Document Responder to query local information in response to a received Cross Gateway Query [ITI-38]. The MHD Document Responder response must be augmented with the homeCommunityId of the Responding Gateway's community prior to returning in the response to the Cross Gateway Query.
- shall initiate a Retrieve Document [ITI-68] transaction to a local MHD Document Responder to retrieve local information in response to a Cross Gateway Retrieve [ITI-39].

When a Responding Gateway is not grouped with a MHD Document Consumer it is expected to be using non-IHE specified interactions to collect local information in response to a Cross Gateway Query or Cross Gateway Retrieve. These proprietary interactions are not further described within any IHE profile.

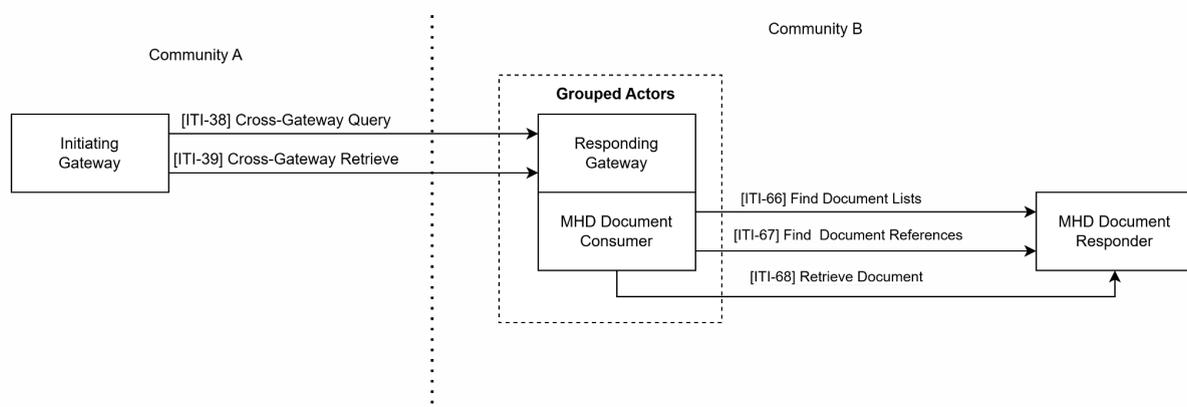


Figure 18.2.3.3-1: Responding Gateway grouped with MHD Document Consumer

Add Section 27.2.3 Grouping Rules with the following:

27.2.3 Grouping Rules

Grouping with a Patient Demographics Consumer is used in situations where a Responding Gateway belongs to a community which defines document sharing using the MHD Profile, that is an MHDS community.

When a Responding Gateway belongs to an MHDS community, it may resolve Cross Gateway Patient Discovery transactions by grouping with a Patient Demographics Consumer implementing the Match Operation Option and using the Patient Demographics Match transaction.

Responding Gateways that are grouped with a Patient Demographics Consumer implementing the Match Operation Option shall initiate a Patient Demographics Match [ITI-119] transaction to a local Patient Demographics Supplier to query local demographic information in response to a received Cross Gateway Patient Discovery [ITI-55].

When a Responding Gateway is not grouped with a Patient Demographics Consumer it is expected to be using non-IHE specified interactions to collect local information in response to a Cross Gateway Patient Discovery. These proprietary interactions are not further described within any IHE profile.

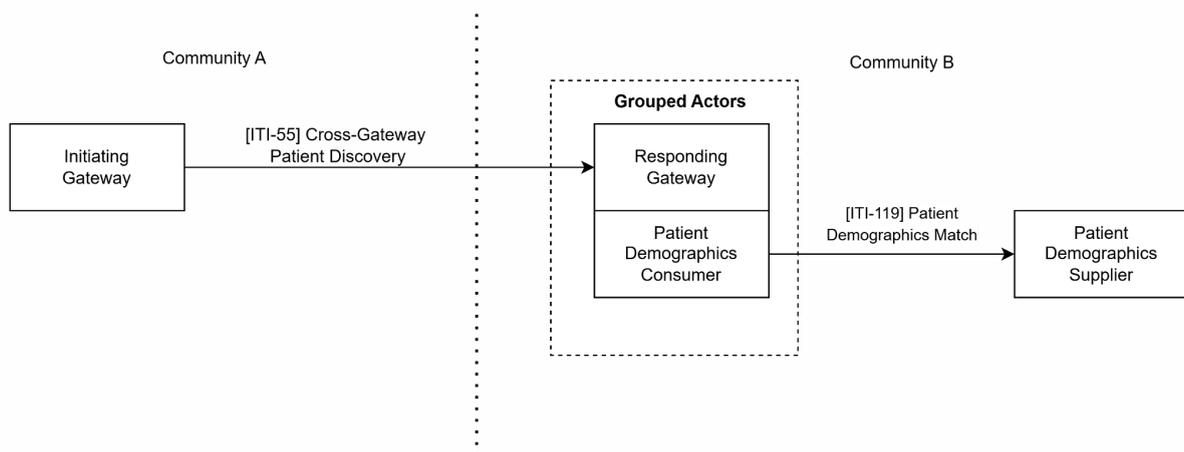


Figure 27.2.3-1: Responding Gateway grouped with Patient Demographics Consumer

Add Section 1.50.6.3 MHDS communities with the following:

1.50.6.3 MHDS communities

1.50.6.3.1 Federation of MHDS communities

Federation of MHDS communities can be performed via the grouping of a Responding Gateway with an MHD Document Consumer as described in XCA profile at Section 18.2.3.3 and via the grouping of a Responding Gateway with a Patient Demographics Consumer as described in XCPD profile at Section 27.2.3

1.50.6.3.2 homeCommunityId

In order for an MHDS community to federate it must have a globally unique identifier. For details see Section 18.3.2 and 3.38.4.1.2.1

1.50.6.3.3 Design Considerations

When receiving a resource containing some elements of type `CodableConcept`, since more than one code may be provided, the Responding Gateway SHOULD select the one that best suits its MHDS community and drop all other extra codes.