

IHE Change Proposal

Tracking information

IHE Domain:	IT Infrastructure
Change Proposal ID:	CP-ITI-1326-01
Change Proposal Status:	Assigned
Date of last update:	November 24, 2025
Person assigned:	John Moehrke

Change Proposal Summary Information

MHD support for homeCommunityId and repositoryUniqueId	
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Submission Date:	November 5, 2025
Profile(s) affected:	MHD
Actor(s) affected:	Document Consumer, Document Responder
IHE Technical Framework or Supplement modified:	IHE ITI MHD (current)
Volume(s) and Section(s) affected:	Volume 1, 2, 3
Detailed Rationale for Change: There are multiple use-cases identified: - Document Consumer using MHD to access cross-boarder XCA communities. Where the Document Consumer knows which communities that it is allowed to access, vs those it does not have the authorization. Efforts to implement MHD in cross domain settings has shown the need to identify and find data originating in different source communities, and that the cross-community identification is missing from the MHD profiles. Research across the internet revealed that in Switzerland a similar need may have emerged. See: https://fhir.ch/ig/ch-epr-fhir/iti-mhd.html. In this localized MHD profile a Federated Cross Community Access option is introduced. Given this, there is a need for Document Consumer to - see in the search results the homeCommunityId where each result came from, so that it can appropriately apply business rules to avoid requesting data from a homeCommunityId that it is not authorized to ask. - Include targeting homeCommunityId in search requests. - With the recent introduction of the XC-WADO profile (IHE Radiology) a need for an Imaging Document Consumer to receive the homeCommunityId. As the MHD profile suggests a grouping with an XCA initiating gateway it was concluded that, whereas an ITI-18 response may include the homeCommunityID an ITI-67 transaction does not. As the RAD-160 (cross-community WADO-rs image retrieve) transaction requires the homeCommunityId, this introduces complexity that can easily be taken away by including these parameters in an ITI-67 response.	

<same as the Log Summary field below>

Therefore, there is a need :

- A. To include in MHD SubmissionSet, Folder, and DocumentReference the homeCommunityId where that artifact resides, when a homeCommunityId is available.
- B. The values would not be required, rather there is a well-defined way for a Document Responder to include when it has it.
- C. Search Parameter in ITI-66 (Find Document Lists), and ITI-67 (Find Document References) for targeting homeCommunityId(s) (like is added to XCA in the Targeted Communities Option)
- D. This new capability could be contained in a “Targeted Communities” Option, like was done with XCA. This would also have the benefit of making clear that the linkage needs to be similarly supported.

Alternatives:

- i. Use Extensions for homeCommunityId
- ii. Add the identifiers as Identifier.type values to the .identifier element
- iii. Mixture of i and ii.

The benefit of using the .identifier is that the element is already there and can already be the target of searches. The drawback is that these two identifiers are not identifiers of “this” artifact, but rather an identifier of some community or some server holding “this” artifact and many more. Thus it would not be a unique business identifier (see FHIR <https://build.fhir.org/event-definitions.html#Event.identifier>).

Proposed to use Extensions

see PR <https://github.com/IHE/ITI.MHD/pull/259>

CI Build

<https://build.fhir.org/ig/IHE/ITI.MHD/branches/CP-ITI-MHD-homeCommunityId/index.html>

This CP is the formal ballot, but the PR may be more accurate due to the validation and checking that the IG Publisher applies.

Proposed Change(s)

Add the following FHIR artifacts as indicated in Sushi (FSH) below

Extension: HomeCommunityId

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```
Id: ihe-HomeCommunityId
Title: "The homeCommunityId where this artifact lives"
Description: "The globally unique, immutable, identifier of the homeCommunityId
entity where this artifact exists. The format of the identifier is an OID."
* ^context[+].type = #element
* ^context[=].expression = "DocumentReference"
* ^context[+].type = #element
* ^context[=].expression = "List"
* value[x] only Identifier
* valueIdentifier 1..1
* valueIdentifier.system = "urn:ietf:rfc:3986" //(exactly)
* valueIdentifier.value obeys mhd-startswithoid

Instance: IHE-TargetCommunityIdList
InstanceOf: SearchParameter
Title: "search on the IHE defined extension for homeCommunityId"
Usage: #definition
* url =
"https://profiles.ihe.net/ITI/MHD/SearchParameter/IHE-TargetCommunityIdList"
* description = "This SearchParameter enables finding by the homeCommunityId
where DocumentReference, submissionSet, or folder exist."
* name = "TargetCommunityIdList"
* status = #active
* code = #targetCommunityIdList
* base[+] = #List
* base[+] = #DocumentReference
* expression =
"(extension('https://profiles.ihe.net/ITI/MHD/StructureDefinition/ihe-HomeCommuni
tyId').value.ofType(Identifier))"
* type = #token
```

// Then update MhdList

```
* extension contains HomeCommunityId named homeCommunityId 0..1
```

// and MinimalDocumentReference

```
* extension contains HomeCommunityId named homeCommunityId 0..1
```

Actor Options

Add to Document Responder and Document Consumer the Target Communities Option

1:33.2.7 Target Communities Option

The **Target Communities Option** adds support for homeCommunityId to the Document Responder and Document Consumer actors. Support includes populating the homeCommunityId when it is available and policy allows for the element to be populated. Document Responder SHALL support the search parameters, and the Document Consumer may use the search parameter.

Add to ITI-66: add the following search parameter

targetCommunityIdList: This IHE extension on parameters defined as IHE-TargetCommunityIdList, of type token, specifies the homeCommunityId value supplied in the List Resource. This parameter will only function when the Targeted Communities Option is declared, and where the backend also supports it (e.g., XCA Targeted Communities.)

Add to ITI-66: add the following section

2:3.66.4.1.3.2 Target Communities Option

The Document Responder SHOULD populate the **homeCommunityIds** extension when a value for is available and policy allows it to be populated. The population of this element is identified in the Target Communities Option but the extension population is allowed at any time.

The Document Responder declaring the **Target Communities Option** SHALL support the IHE-HomeCommunityIds search parameter, and shall return an error when the homeCommunityId can not be fulfilled, see XCA Target Communities Option. The Document Consumer declaring the **Target Communities Option** MAY use this search parameter. Actors

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not declaring the **Target Communities Option** may support the search parameter. Support for the Search parameter SHALL be declared in the product/implementation CapabilityStatement.

Add to ITI-67: add the following search parameter

targetCommunityId: This IHE extension on parameters defined as IHE-TargetCommunityIdList, of type token, specifies the homeCommunityId value supplied in the DocumentReference Resource. This parameter will only function when the Targeted Communities Option is declared, and where the backend also supports it (e.g., [XCA Targeted Communities](#).)

Add to ITI-67: add the following section

2:3.67.4.2.2.1.6 Target Communities Option

The Document Responder SHOULD populate the **homeCommunityId** extension when a value is available and policy allows it to be populated. The population of this element is identified in the Target Communities Option but the extension is allowed at any time.

The Document Responder declaring the **Target Communities Option** SHALL support the IHE-TargetCommunityIdList search parameter, and shall return an error when the homeCommunityId can not be fulfilled, see XCA Target Communities Option. The Document Consumer declaring the **Target Communities Option** MAY use this search parameter. Actors not declaring the **Target Communities Option** may support the search parameter. Support for the Search parameter SHALL be declared in the product/implementation CapabilityStatement.

Add to Document Consumer and Document Responder CapabilityStatement

```
    },
    {
      "name": "targetCommunityIdList",
      "definition":
"https://profiles.ihe.net/ITI/MHD/SearchParameter/IHE-TargetCommunityIdList",
      "type": "token",
      "documentation": "This SearchParameter enables finding by the
homeCommunityId where DocumentReference, submissionSet, or folder exist."
```

IHE_TF_CP-Template-V5.doc

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