



Cross Community Access Profile

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- **Vision – 2006 IHE White Paper on Cross Community Information Exchange**
- **Scope of Cross Community Access profile**
- **Transaction Diagram**
- **Actors and Transactions**
- **Process Flow**
- **Implications to Document Consumers**

- **Open issues**
- **Future work**

Cross Community Information Exchange White Paper

Developed concept of “community” and exchange of health information across communities

Released in August 2006

Available on www.ihe.net under “Resources – Technical Frameworks” then select IT Infrastructure

Defines two types of cross community information exchange:

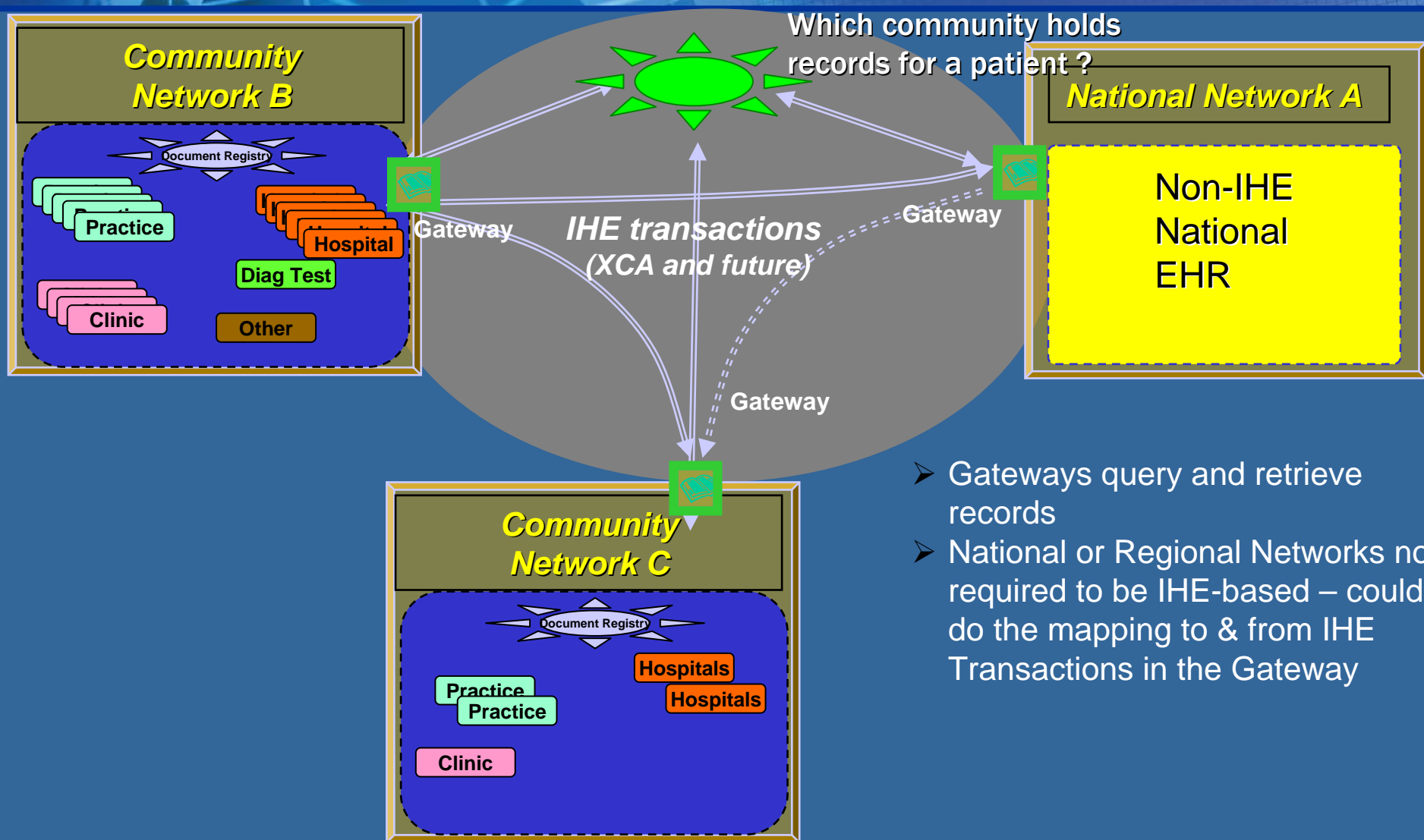
- Hierarchical
- Lateral

Defines a set of profiles which are useful in both types of community information exchanges.

The first step in realizing the vision of this whitepaper is the Cross Community Access profile

Hierarchical Exchange

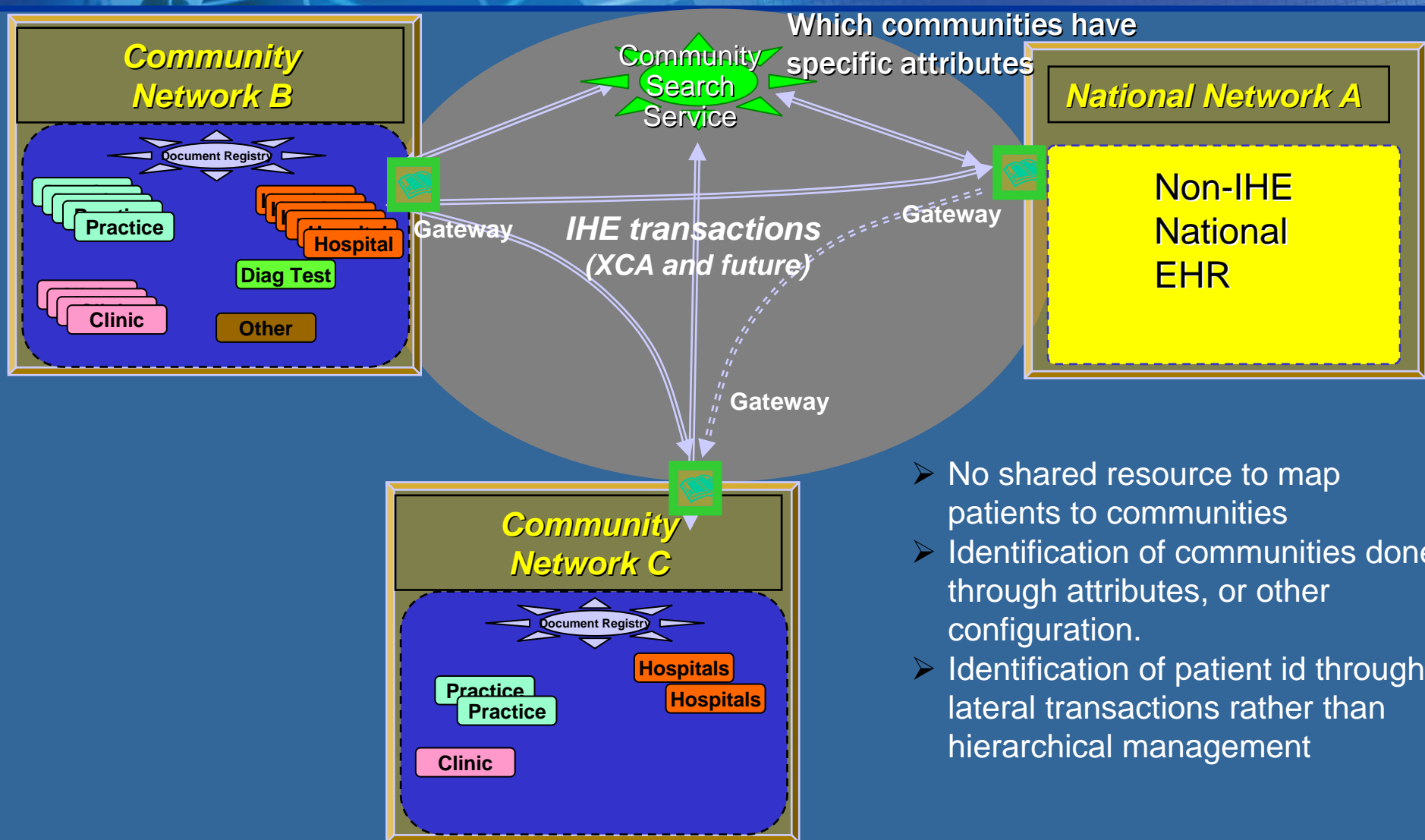
From Cross Community Information Exchange White Paper



- Gateways query and retrieve records
- National or Regional Networks not required to be IHE-based – could do the mapping to & from IHE Transactions in the Gateway

Lateral Exchange

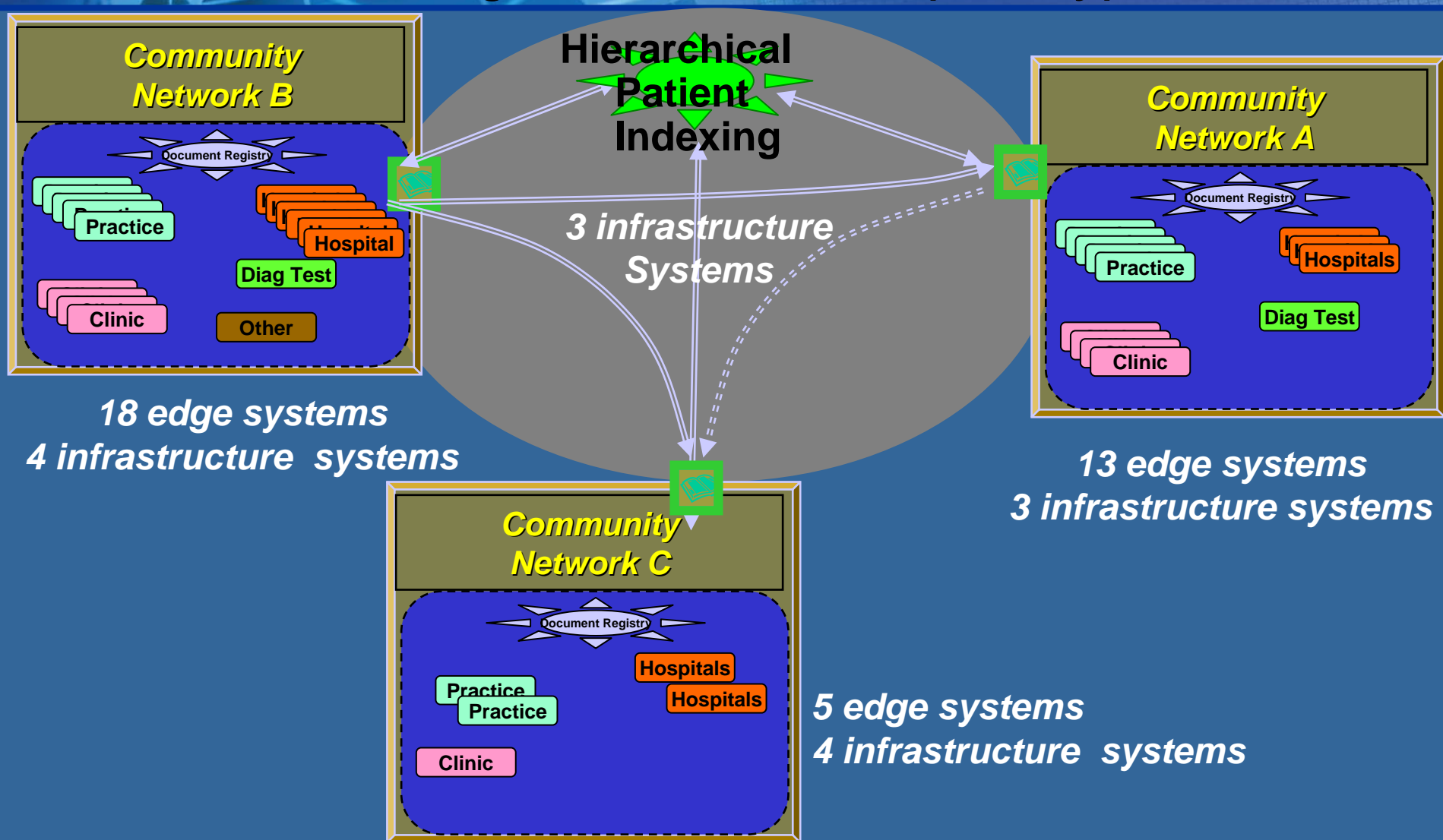
From Cross Community Information Exchange White Paper



- No shared resource to map patients to communities
- Identification of communities done through attributes, or other configuration.
- Identification of patient id through lateral transactions rather than hierarchical management

HIMSS Interoperability Showcase

The largest multi-vendor prototype ever built!

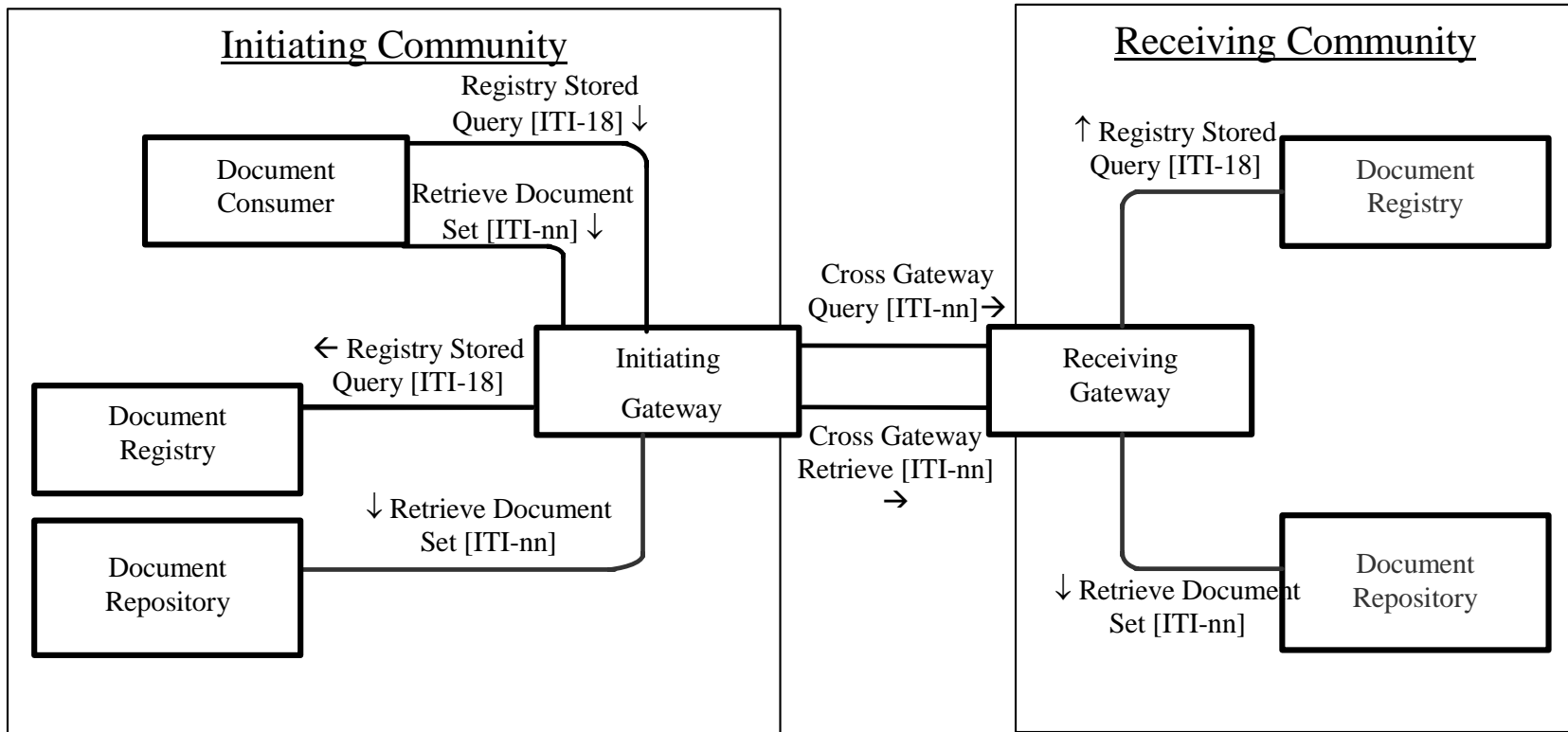


Cross Community Access

Scope

- *Sharing of documents across communities*
- *Re-use of XDS.b transactions.*
- *Document Consumer consistency*
 - *Requirements of Document Consumer are the same as for local document query and retrieval*
- *Out of scope:*
 - *How to identify which communities to interact with*
 - *How to identify the patient id to use when interacting*

XCA Transaction Diagram



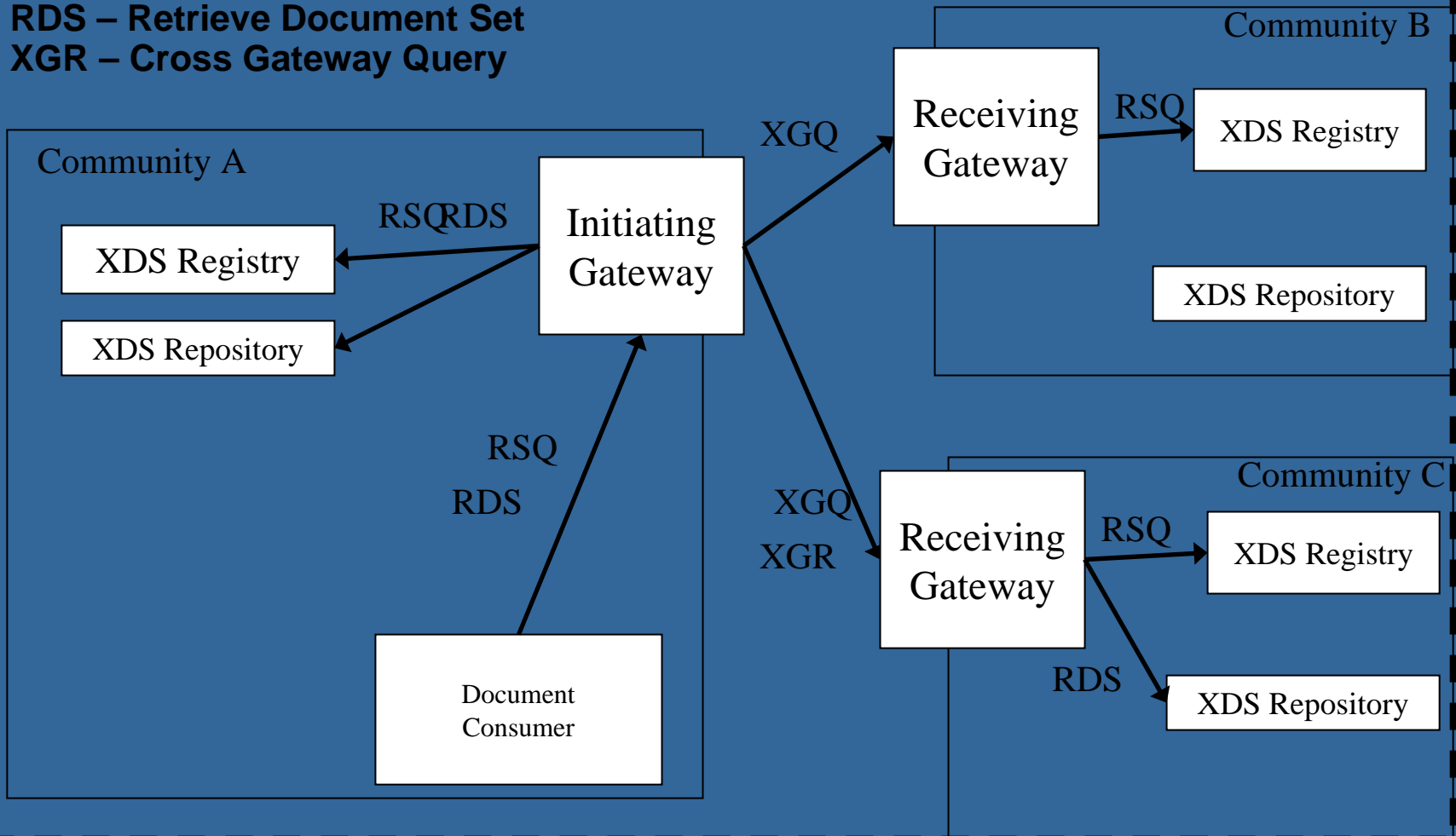
Cross Community Access

Actors and Transactions

- *Document Consumer*
 - *Supports Registry Stored query and Retrieve Document Set*
 - *New requirement: propagation of the homeCommunityId requirement*
 - *Applies to XDS.a, XDS.b and XCA profiles*
- *Initiating Gateway*
 - *On behalf of internal actors, initiates all transactions leaving the community*
 - *Receives Registry Stored Query and Retrieve Document Set from Document Consumer*
 - *Propagates transaction to local Document Registry and Repository, if appropriate*
 - *Propagates transaction to other communities by contacting their Receiving Gateway and sending: Cross Gateway Query and Cross Gateway Retrieve*
- *Receiving Gateway*
 - *Single contact point for all transactions coming in to the community.*
 - *Propagates incoming transactions to local actors*
- *New Transactions:*
 - *Cross Gateway Query: from Initiating Gateway to Receiving Gateway, mimics Registry Stored Query*
 - *Cross Gateway Retrieve: from Initiating Gateway to Receiving Gateway, mimics Retrieve Document Set*

XCA Process Flow

RSQ – Registry Stored Query
XGQ – Cross Gateway Query
RDS – Retrieve Document Set
XGR – Cross Gateway Query

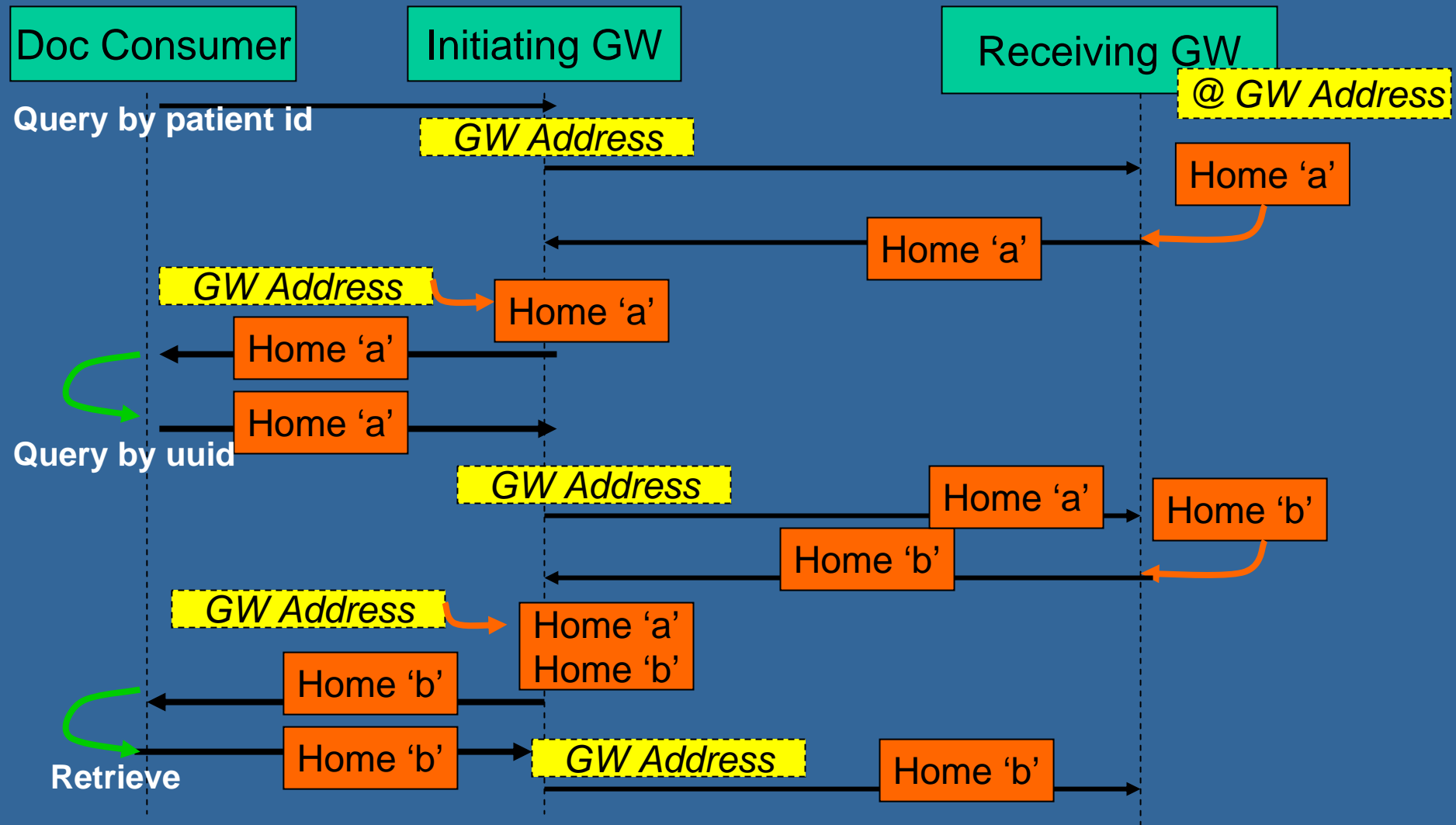


homeCommunityId

- **NEW:** requirement for all Document Consumer implementers (XDS.a, XDS.b, XCA)
- **SHALL** propagate homeCommunityId value to subsequent Registry Stored Query (XDS.a & XDS.b) or Retrieve Document Set (XDS.b only) transactions.
- homeCommunityId corresponds to the 'home' attribute defined on the relevant ebRIM 3.0 elements. Example:

```
<ExtrinsicObject status="urn:oasis:names:tc:ebxml-regrep:StatusType:Approved"  
home="http://ihe.net/ReceivingGatewayTestProgram/2222145656" >
```
- homeCommunityId value is unique and opaque
- Used by Initiating Gateway to map to the originator of the data
- New optional parameter to stored queries which do not include a patient id.
- Optional parameter on the new Retrieve Document Set transaction

Processing of "home" (homeCommunityId)



Considerations for Asynchronous Communications

- **Asynchronous Transactions**
 - Extensively discussed
 - Left as an open issue
 - Complicates the transactions to a significant extent
 - Unclear how compelling the need is
 - Support large volumes of data
 - Support significant delay in response
 - Support messaging systems preferences for asynch mode

- **Support Patient Identification Management**
 - Appendix in supplement presents some possible solutions
- **Support Locator Service (PIX+, RLS, RLUS type service)**



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