IHE-Europe webinar
How vendors work together at national level across hospitals

February 2024

Introduction presenters

◆ Vincent van den Berg
  ◆ Digital Health Innovator @ChipSoft & Vendor co-chair @IHE Netherlands

◆ Jasper van der Zwaag
  ◆ Interoperability & Data Exchange Consultant @ChipSoft

◆ Koen Arnoldus
  ◆ Interoperability Succcess Lead Netherlands @Epic

Questions? Feel free to ask

Agenda

1. Introduction and welcome
2. Collaboration of ChipSoft & Epic
3. Future opportunities
4. Future of data exchange in the Netherlands
5. Q&A and discussion

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IHE Netherlands new board

- ◆ New board, new vision:

  "proudly copied from"

- ◆ Members (LTR)

  - ◆ Vincent van den Berg: Vendor co-chair

  - ◆ Evert Sanders: User co-chair

  - ◆ Wim de Koning: Vice vendor co-chair

  - ◆ Robert Breas: Treasurer

Strategy: healthy growth of the ecosystem

2026
Integral approach
Inspired by e.g. eHealth Suisse

2025
Dutch Implementations
e.g. Imaging and Patient Summaries

2024
Adoption IHE methodology
"Proudly copied from …"

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IHE Netherlands within ecosystem

General

- Think Global, act National
- Dutch community building
- Marketing: IHE ≠ XDS
- Education: IHE Academy
- Several events: Connectathon, HL7 WGMs, Local (non)gov events

Role IHE within ecosystem

- Awareness IHE methodology
- User < > Vendor (co-creation)
- National Test and Validation Centre
- Epic: International member *
- ChipSoft: Vendor co-chair IHE NL

* https://open.epic.com/Tech/GetTechSpec?spec=CareEverywhere%20IntegrationStatement.pdf

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Agenda

1. Introduction and welcome
2. **Collaboration ChipSoft & Epic**
   i. Background of the collaboration
   ii. Practical impact
   iii. Technical background
   iv. Outcomes
3. Future opportunities
4. Future of data exchange in the Netherlands
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2 | Collaboration | Background

◆ Collaboration started in the region of Friesland in the northern part of the Netherlands

◆ Two main hospitals formulated an ambition to strengthen cooperation from 2017 forward

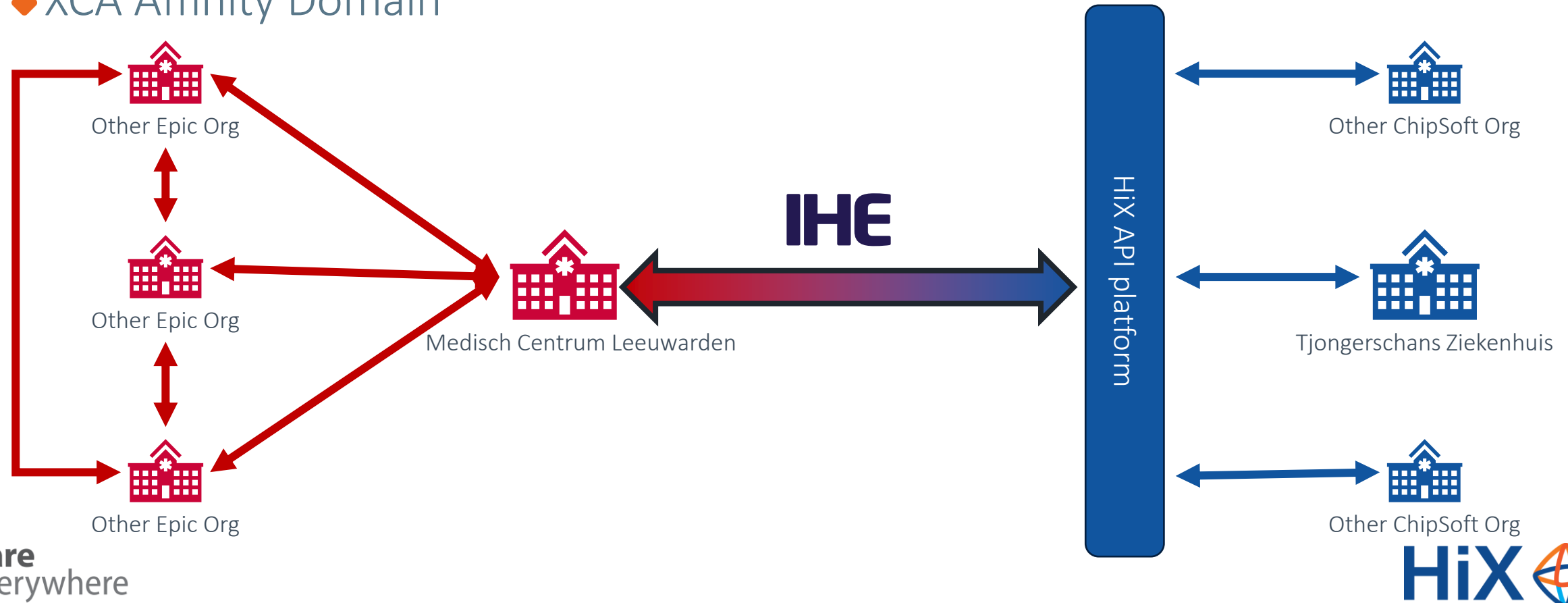# 2 | Collaboration | Practical impact

- The collaboration formed around several principles:
  - We need to **collaborate on several topics**, therefore we need information from both hospitals
  - In some cases, we need to **actually refer** patients to a different hospital
  - We **don't want to burden** the patient and the professional with additional administrative load
  - We wanted to use proven **international standards**

- In the period 2018 – 2022, several things were realised:
  - **Stage 1: Viewing** of relevant data to facilitate users in getting access to relevant data
    - Limited impact on work processes
  - **Stage 2: Intuitive digital referring** from MCL to Tjongerschans and back, for surgical cases
    - Inclusion of a **standardised patient related data set** (Dutch patient summary)
    - Inclusion of (unstandardised) **documents**
    - Impact on processes

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2 | Collaboration | Technical Background

◆ Different gateway architectures between vendors

◆ XCA Affinity Domain

2 | IHE transactions for Pull (XCA)

- Cross Gateway Patient Discovery [ITI-55]
  - "Do you know this patient, and how should we address them?"

- Cross Gateway Query [ITI-38]
  - "What documents do you have available for patient 12345?"

- Cross Gateway Retrieve [ITI-39]
  - "Could you give me Document ABC?"

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2 | Cross Gateway Patient Discovery

- Heavy reliance on Dutch National Citizen ID (BSN)
  - Only verified numbers may be used

- Patient consent is checked by the source:
  - Epic: Registry
  - ChipSoft: Central Registry and decentralized Repositories

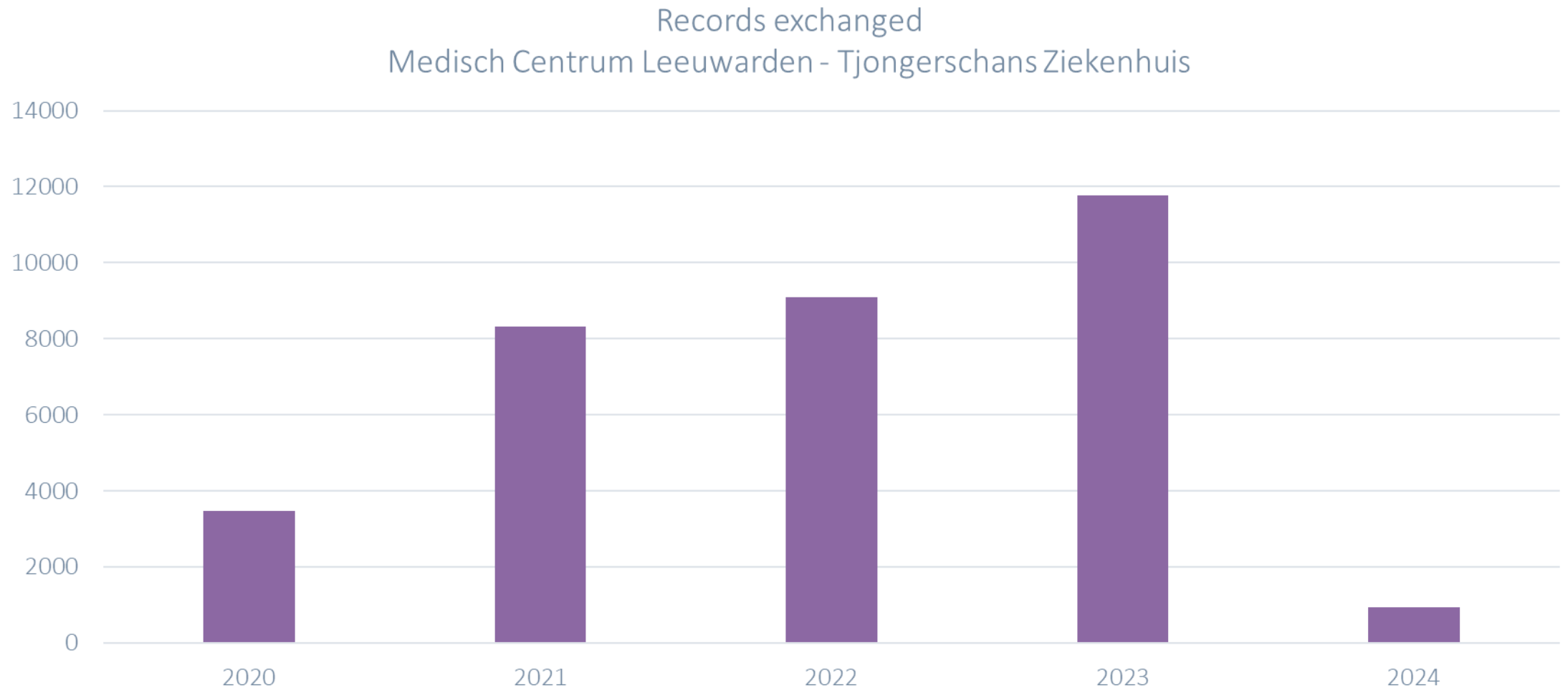IHE | Integrating the Healthcare Enterprise
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2 | Cross Gateway Retrieve

◆ Documents exchanged:

- ◆ Dutch Patient Summary (BgZ) in CDA format
- ◆ Correspondence in PDF/A format
- ◆ Radiology Reports in either PDF/A or CDA format

◆ Testing various other result-based documents

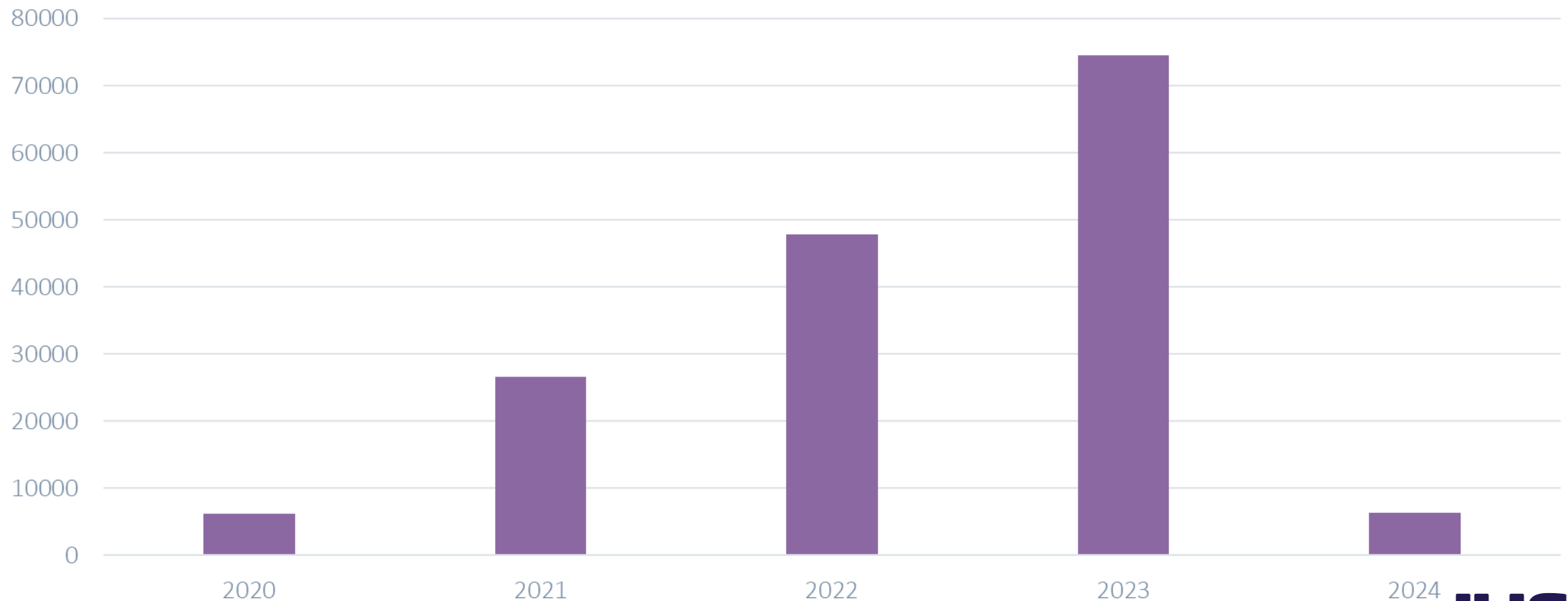- ◆ For example: anatomic pathology and microbiology

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2 | IHE Transaction for Push (XDR)

◆ Cross-Enterprise Document Reliable Interchange (XDR)

 ◆ Provide and Register Document Set-b [ITI-41]

◆ Removing fax and/or unsecure email by sending letter directly

 ◆ No (explicit) consent required

 ◆ Automatic registration of new patients

 ◆ Option to include additional attachments (Patient Summary in CDA)

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2 | Collaboration | Outcomes

Records exchanged
Medisch Centrum Leeuwarden - Tjongerschans Ziekenhuis

2 | Collaboration | Outcomes

Records Exchanged
Medisch Centrum Leeuwarden - ChipSoft

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3 | Future opportunities

Within the Netherlands

- By working together, there is a ~**90%** coverage of Dutch hospitals included in this process

- **Increasing** the use-cases on which ChipSoft, Epic and other softwareproviders can cooperate

- Collaborate on adoption and creation of **intern. standards**

Outside the Netherlands

- There is an increased wish by care institutions to cooperate **internationally**

- The **European Health Data Space** is going to require international interoperability

- Focus on aligning with the Dutch **National Contact Point** (NCP)

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4 | Future of data exchange in the Netherlands

Dutch Technical Agreement

◆ Notified Pull: Exchanging <u>FHIR</u> Data using a generic Notified-Pull mechanism (STU3)

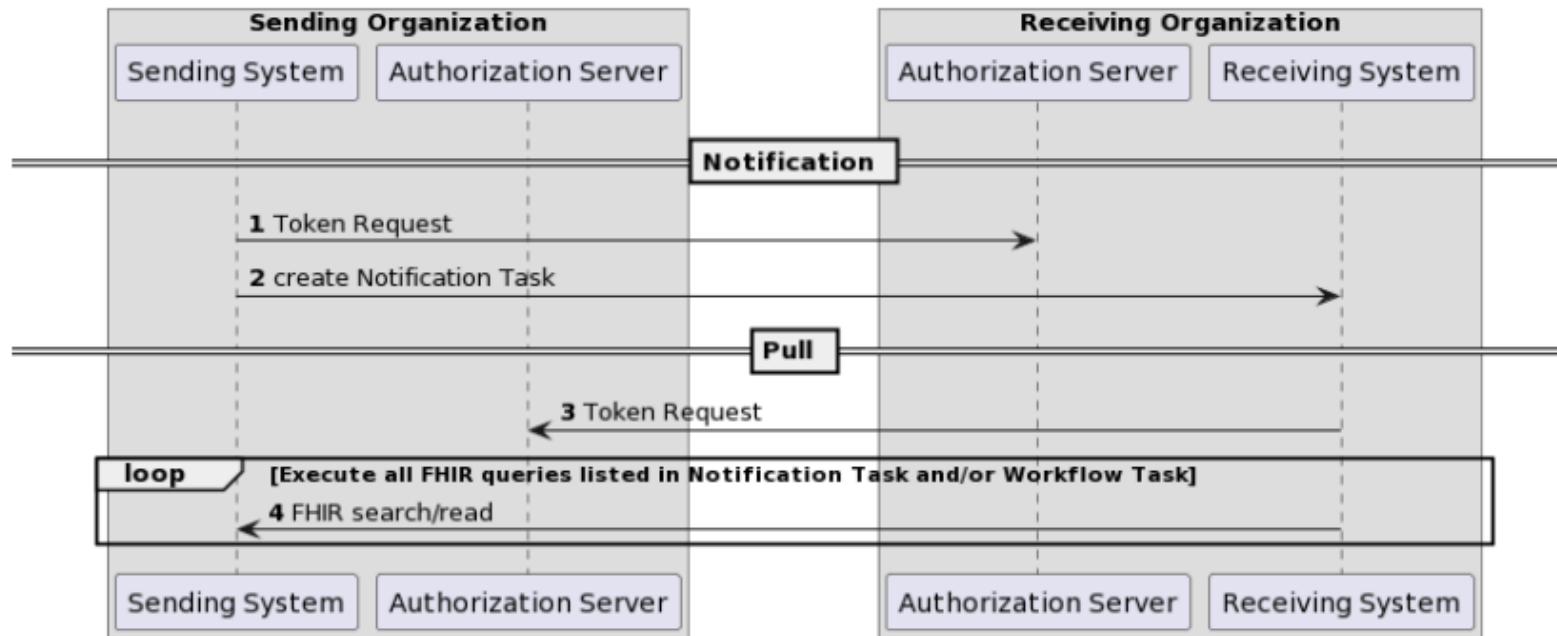◆ Twiin: Dutch trusted exchange framework and common agreement (inspired by TEFCA USA)

4 | Future of data exchange in the Netherlands

Dutch Technical Agreement

◆ Notified Pull: Exchanging <u>FHIR</u> Data using a generic Notified-Pull mechanism (STU3)

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FHIR R4

◆ IHE profile: Sharing of IPS (sIPS) based on FHIR R4
  ◆ Publishing an IPS
  ◆ On Demand Access to an IPS
  ◆ Retrieving an IPS
  ◆ Pushing an IPS to a Recipient

◆ Notified-Pull? (HL7 international)

Sharing of IPS (sIPS)

1.0.0 - Trial-Implementation

This page is part of the Sharing of IPS (sIPS) (v1.0.0: Publication) based on FHIR R4. This is the current published version. For a full list of available versions, see the Directory of published versions

Sharing of IPS (sIPS) Home

Official URL: https://profiles.ihe.net/ITI/sIPS/ImplementationGuide/ihe.iti.sips	*Version*: 1.0.0
Active as of 2023-11-17	*Computable Name*: IHE_ITI_sIPS

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5 | Q&A and discussion

Thank you!