Date: 8 February 2021

Re: Zorg Adresboek open consultation round

Submitted Electronically

To the Informatieberaad,

We appreciate the opportunity to participate in the open consultation for the Zorg Adresboek (hereafter the Zorg-AB). Epic sees value in this central service. It has the potential to solve the long-standing practical challenge of maintaining up-to-date directory information for providers, practices, and pharmacies.

Below is our detailed feedback on version 2.4 of the Zorg-AB *Implementatiehandleiding.*

Standards

- We recommend adopting FHIR version R4 instead of STU3. R4 is the most recent and mature specification offered by FHIR. It also represents the first normative release. This means that mature parts of the specification will have fewer changes in the future and the normative content will be backwards-compatible.
- We recommend aligning the FHIR profiles used for the Zorg-AB with similar profiles that make up the international *Validated Healthcare Directory Implementation Guide* for increased standardization and possible international exchange. The specification is available here: http://build.fhir.org/ig/HL7/VhDir/

Data Quality

Preventing duplicative or outdated provider and location information is presumably the largest challenge that the Zorg-AB is positioned to solve. When multiple sources of truth exist, the risk of duplicative data increases. Multiple sources of truth would still exist with the Zorg-AB. This leads to additional ICT maintenance work to identify and remove duplicative data. This requires defining an airtight set of processes that will ensure that data is able to be consolidated, duplicative data is properly discarded, and outdated data is identifiable. The comments below are suggestions based on past experiences and our review of the implementation guide:

- A key strategy for removing duplicative data is to identify an immutable set of primary fields that function as a unique identifier. We recognize that for pharmacies, the URA id can be used as a key identifier. However, these key identifiers are not yet defined for provider and non-pharmacy locations. We recommend defining the primary keys that ensure that each object in the Zorg-AB possesses a unique combination of provider and location.
- When updating data, it appears that only the source that submitted the update would be able to modify the associated object. Consider a method for also ensuring that the source systems such as Vecozo and LSP are kept in sync with changes submitted by a care organization. This ensures that the source systems remain the source of truth.
- In section 2.1, the Zorg- AB should define an explicit relationship between a physical address and telecom information. Providers practice at multiple locations. We suggest that Telecom becomes a subclass of Address, since it is possible that a single Address class could have multiple Telecom types, like Phone, URL, Email, or Fax.
- In section 2.1, the WorksAt class should also have an indirect or direct relationship with Address. This also ensures that the WorksAt class is also tied to the address of the location where services are provided.

Data Model

- We strongly suggest that existing Object Identifiers (OID) are included in both the implementation guide as well as the technical transactions. The Zorginformatiebouwsteen model already has a number of data elements where there is a specific discrete code system and corresponding unique Object Identifier (OID) defined. For example, the specifications require the ISO 3166-1 alpha-2 code from a country. This corresponds with an OID of 1.0.3166.1.2.2. This also applies for other elements such as Gender, Languages, Type.Type, and WorksAt.Specialty. We recommend including both the code and the code system in the transaction. This will give assurance that the code being used belongs to the defined code set. This also protects against possible future updates where a different code system may be used.
- In elements with a constrained value set, the values should be represented by a specific codeset. Examples of constrained value sets without a codeset are: Address.Type, Telecom.Type, OrganizationName.Type, IHE Electronic Service.Type.
- Within Identification.Type, the allowed values should receive an Assigning Authority ID.
- Only a singular Specialty is currently allowed in the "WorksAt" and "Party" objects. We recommend that multiple specialties be allowed, as it can occur that a provider works under multiple specialties.
- Specialty currently appears to be restricted to providers. Allow Organizations and SubOrganizations to also be defined with a specialty. This provides valuable information to a referrer about the services performed by a care organization.
- Lastly, Suborganization does not permit for a hierarchy other than a single link back to a main organization. We recommend an additional layer to handle organizations with multiple locations. It may be useful to have SubOrganization departments linked to a SubOrganization hospital/clinic that is then linked to the main Organization.
- The specifications include sample messages for querying the Zorg-AB, but are missing fully-specified sample response messages. For example, on page 62 the sample response contains a general "Resultaten" placeholder. The implementation guide should include fully-specified sample response messages.

We welcome further questions and comments about any of the points provided above. Thanks for your consideration.

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