

# **AGFA HEALTHCARE FHIR Conformance Statement**



## **Enterprise Imaging Scheduling 6.15**

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## Document Information

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# 1 INTRODUCTION

## 1.1 Revision Record

| FHIR Conformance Statement Template, Livelihood Node ID: 65788844 |               |                                      |
|---|---------------|--------------------------------------|
| Version   | Date          | Reason for Change                    |
| 2   | August 2018   | Initial revision                     |
| 3   | February 2019 | all corrections made in review cycle |
| 4   | February 2019 | Chapter 2 changes                    |

| FHIR Conformance Statement Enterprise Imaging Scheduling 6.15 |            |                   |
|---|------------|-------------------|
| Version   | Date       | Reason for Change |
| 2   | March 2024 | Initial Revision  |

## 1.2 Purpose and Intended Audience of this Document

### **DISCLAIMER:**

This document is a Technology Preview of the FHIR capabilities of Enterprise Imaging Scheduling 6.15. Some profiles, extensions or parameters may be deprecated without notice in future versions of Enterprise Imaging Scheduling. Therefore, AGFA HealthCare shall not be liable for loss of functionalities with non AGFA products which implemented a FHIR interface with EI Scheduling 6.15, in case EI Scheduling is upgraded.

This document is a FHIR Conformance Statement for the FHIR Services of Enterprise Imaging Scheduling 6.15.

The user of this document is involved with system integration and/or software design. We assume that the reader is familiar with the terminology and concepts that are used in FHIR standard and the IHE Technical Framework.

Readers not familiar with FHIR terminology should first read the appropriate parts of the FHIR standard itself, prior to reading this conformance statement.

Although the use of this conformance statement in conjunction with the FHIR standard is intended to facilitate communication with Enterprise Imaging Scheduling 6.15, it is not sufficient to guarantee, by itself, the inter-operation of the connection between Enterprise Imaging Scheduling 6.15 and the 3rd party FHIR-based system.

The integration of any device into a system of interconnected devices goes beyond the scope of the FHIR standard and this conformance statement when *interoperability* is desired. The responsibility for analyzing the applications requirements and developing a solution that integrates the Agfa equipment with other vendors' systems is the user's responsibility and should not be underestimated.

## 1.3 About FHIR

Fast Healthcare Interoperability Resources (FHIR, pronounced "Fire") defines a set of "Resources" that represent granular clinical concepts. The resources can be managed in isolation, or aggregated into complex documents. This flexibility offers coherent solutions for a range of

interoperability problems. The simple direct definitions of the resources are based on thorough requirements gathering, formal analysis and extensive cross-mapping to other relevant standards.

Each resource carries a master id. The id is never changed or reused, and it identifies the resource permanently. Resources may refer to other resources by id knowing that this is stable reference. Each resource has a URL which is derived from the id, the type, and the local base URL. Given one resource address, the address of any other resource can be automatically determined.

Resources contain references to other resources. While each resource can be read and/or changed without explicit reference to these other resources, the presence of these references influences the behaviour of the system: implementations are required to maintain system and data integrity at all times.

Each resource supports the same list of transactions - read, update, delete, etc. One particularly important transaction supported by every resource type is the provision of a conformance statement which specifies what parts of the defined content model are supported by the system, and what other transactions or interactions are supported. If any of the other interactions are supported, the conformance interaction must be supported. (i.e. if the conformance interaction returns an error, no operations are supported).

The exchange specifications are simple and straight forward and based around direct description of the XML representation of the resource. Each resource is described separately, though there are some common patterns used across all the resources (called "data types"). In addition to the simple XML definitions, a schema and UML class diagram are available for each resource. The UML class diagram represents the same logical model as the XML format (though because of UML issues, implementors should not expect the UML model to lead to interoperable implementations).

Further, each xml element (or matching UML class, attribute and composition association) is associated with a reference into a single integrated ontology that serves as a data dictionary. As well as more precisely defining the element, the data dictionary specifies the mappings from the element into other standards.

Technically, FHIR is designed for the web; the resources are based on simple XML or JSON structures, with an http-based RESTful protocol where each resource has predictable URL. Where possible, open internet standards are used for data representation.

## 1.4 General Remarks

### 1.4.1 Integration and Validation Activities

The integration of any device into a system of interconnected devices goes beyond the scope of the FHIR standard and this conformance statement when interoperability is desired. The responsibility for analyzing the applications requirements and developing a solution that integrates the Agfa equipment with other vendors' systems is the user's responsibility and should not be underestimated.

In some circumstances it might be necessary to perform a validation to make sure that functional interoperability between the Agfa equipment and non-Agfa devices works as expected. The user should ensure that any non-Agfa provider accepts responsibility for any validation required for their connection with the Agfa equipment.

To help this integration validation we provide **FHIR Conformance Profiles** "[001678 Enterprise Imaging Scheduling 6.15 FHIR Conformance Profiles](https://www.agfahealthcare.com/fhir-conformance-statement/)" available on <https://www.agfahealthcare.com/fhir-conformance-statement/>.

## 1.4.2 Future Evolution

As the FHIR standard evolves to meet the user's growing requirements and to incorporate new features and technologies, AGFA HealthCare will follow the evolution of the standard. This evolution of the standard may require changes to devices that have implemented FHIR. The user should ensure that any non-AGFA provider, who connects with AGFA devices, also plans for future evolution of the FHIR standard. A refusal to do so may result in the loss of functionality and/or connectivity between the different products.

## 1.5 Acronyms and Abbreviations

Definitions, terms and abbreviations used in this document, many of which are defined within the FHIR standard. Abbreviations and terms are as follows:

|         |   |
|---------|---|
| FHIR    | Fast Healthcare Interoperability Resources      |
| HL7     | Health Level 7                                  |
| IHE     | Integrating the Healthcare Enterprise           |
| RESTful | Representational State Transfer ( <b>REST</b> ) |
| UML     | Unified Modeling Language                       |
| URI     | Uniform Resource Identifier                     |
| URL     | Uniform Resource Locator                        |
| XML     | Extensible Markup Language                      |

## 1.6 Related Documents

- HL7 FHIR Standard current version - see [www.hl7.org/fhir](http://www.hl7.org/fhir)
- [IHE Radiology Technical Framework](#)
- [IHE IT Infrastructure Technical Framework](#)

## 2 CAPABILITY STATEMENT

### 2.1 RESTful Interactions

| Resource Type       | STU3 Resource                       | Enterprise Imaging Scheduling Profile | Read | Search         | Update | Patch | Create | Delete |
|---------------------|-------------------------------------|---------------------------------------|------|----------------|--------|-------|--------|--------|
| Appointment         | <a href="#">Appointment</a>         | Appointment                           | √    | √              | √      |       | √      | √      |
| Binary              | <a href="#">Binary</a>              | Binary                                | √    |                |        |       |        |        |
| CodeSystem          | <a href="#">CodeSystem</a>          | CodeSystem                            | √    | √              |        |       |        |        |
| Device              | <a href="#">Device</a>              | Device                                | √    | √              |        |       |        |        |
| DocumentReference   | <a href="#">DocumentReference</a>   | DocumentReference                     | √    | √              |        |       | √      | √      |
| Encounter           | <a href="#">Encounter</a>           | Encounter                             | √    | √              |        |       |        |        |
| HealthcareService   | <a href="#">healthcareService</a>   | HealthcareService                     | √    | √              |        |       |        |        |
| List                | <a href="#">List</a>                | List                                  | √    | √              |        |       |        |        |
| Location            | <a href="#">Location</a>            | Location                              | √    | √              |        |       |        |        |
| NamingSystem        | <a href="#">NamingSystem</a>        | NamingSystem                          | √    | √              |        |       |        |        |
| Observation         | <a href="#">Observation</a>         | Observation                           | √    | √              | √      |       | √      | √      |
| OperationDefinition | <a href="#">OperationDefinition</a> | OperationDefinition                   | √    |                |        |       |        |        |
| Organization        | <a href="#">Organization</a>        | Organization                          | √    | √              |        |       |        |        |
| Patient             | <a href="#">Patient</a>             | Patient                               | √    | √              |        |       |        |        |
| Practitioner        | <a href="#">Practitioner</a>        | Practitioner                          | √    | √              |        |       |        |        |
| PractitionerRole    | <a href="#">PractitionerRole</a>    | PractitionerRole                      | √    | √              |        |       |        |        |
| ProcedureRequest    | <a href="#">ProcedureRequest</a>    | ProcedureRequest                      | √    | √              | √      |       | √      |        |
| Schedule            | <a href="#">Schedule</a>            | Schedule                              | √    |                |        |       |        |        |
| Slot                | <a href="#">Slot</a>                | Slot                                  |      | √ <sup>1</sup> |        |       |        |        |
| StructureDefinition | <a href="#">StructureDefinition</a> | StructureDefinition                   | √    |                |        |       |        |        |
| ValueSet            | <a href="#">ValueSet</a>            | ValueSet                              | √    | √              |        |       |        |        |

### 2.2 Search Parameters & Operations per resource type

This is documented in [001678 Enterprise Imaging Scheduling 6.15 FHIR Conformance Profiles](#) available on <https://www.agfahealthcare.com/fhir-conformance-statement/>.

<sup>1</sup> Custom Search Queries

### 3 ENTERPRISE IMAGING SCHEDULING PROFILES

This is documented in [001678 Enterprise Imaging Scheduling 6.15 FHIR Conformance Profiles](https://www.agfahealthcare.com/fhir-conformance-statement/) available on <https://www.agfahealthcare.com/fhir-conformance-statement/>



## 4 EXTENSIONS

This is documented in [001678 Enterprise Imaging Scheduling 6.15 FHIR Conformance Profiles](#) available on <https://www.agfahealthcare.com/fhir-conformance-statement/>

## 5 CODE SYSTEMS & VALUE SETS

This is documented in [001678 Enterprise Imaging Scheduling 6.15 FHIR Conformance Profiles](#) available on <https://www.agfahealthcare.com/fhir-conformance-statement/>



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