

Integrating the Healthcare Enterprise



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**IHE Eye Care
Technical Framework Supplement**

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**Eye Care Summary Record
(EC-Summary)**

15

Trial Implementation

20 Date: July 14, 2015
Author: IHE Eye Care Technical Committee
Email: eyecare@ihe.net

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Please verify you have the most recent version of this document. See [here](#) for Trial Implementation and Final Text versions and [here](#) for Public Comment versions.

Foreword

30 This is a supplement to the IHE Eye Care Technical Framework V3.7. Each supplement undergoes a process of public comment and trial implementation before being incorporated into the volumes of the Technical Frameworks.

This supplement is published on July 14, 2015 for trial implementation and may be available for testing at subsequent IHE Connectathons. The supplement may be amended based on the results of testing. Following successful testing it will be incorporated into the Eye Care Technical Framework. Comments are invited and can be submitted at
35 http://ihe.net/Eye_Care_Public_Comments.

This supplement describes changes to the existing technical framework documents and where indicated amends text by addition (**bold underline**) or removal (**~~bold strikethrough~~**), as well as addition of large new sections introduced by editor’s instructions to “add new text” or similar, which for readability are not bolded or underlined.
40

“Boxed” instructions like the sample below indicate to the Volume Editor how to integrate the relevant section(s) into the relevant Technical Framework volume:

<i>Replace Section X.X by the following:</i>
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45

General information about IHE can be found at: www.ihe.net.

Information about the IHE Eye Care domain can be found at: ihe.net/IHE_Domains.

Information about the organization of IHE Technical Frameworks and Supplements and the process used to create them can be found at: http://ihe.net/IHE_Process and
50 <http://ihe.net/Profiles>.

The current version of the IHE Eye Care Technical Framework can be found at:
http://ihe.net/Technical_Frameworks.

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Introduction to this Supplement

125 The Eye Care Summary Record (EC-Summary) describes the structure of data that is collected for a patient's eye care summary medical record, generally for the purpose of transfer or referral of care to another provider.

This supplement is written as changes to the documents listed below. The reader should have already read and understood these documents:

- 130
1. [IHE Eye Care Technical Framework Volume 1, Integration Profiles](#)
 2. [IHE Eye Care Technical Framework Volume 2, Transactions](#)

This supplement also references other documents¹. The reader should have already read and understood these documents:

1. [IHE Eye Care C-CDA based General Eye Evaluation – Trial Implementation](#)
- 135 2. [IT Infrastructure Technical Framework Volume 1](#)
3. [IT Infrastructure Technical Framework Volume 2](#)
4. [IT Infrastructure Technical Framework Volume 3](#)
5. [IHE Patient Care Coordination Technical Framework Volume 1](#)
6. [IHE Patient Care Coordination Technical Framework Volume 2](#)
- 140 7. HL7 Implementation Guide for CDA® Release 2: IHE Health Story Consolidation, DSTU Release 1.1 (US Realm) Draft Standard for Trial Use July 2012
8. HL7 and other standards documents referenced in Volume 1 and Volume 2

Open Issues and Questions

None

145 Closed Issues

None

¹ The first six documents can be located on the IHE Website at http://ihe.net/Technical_Frameworks. The remaining documents can be obtained from their respective publishers.

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General Introduction

Update the following Appendices to the General Introduction as indicated below. Note that these are not appendices to Volume 1.

150 **Appendix A - Actor Summary Definitions**

Add the following actors to the IHE Technical Frameworks General Introduction list of Actors:

No new actors.

Appendix B - Transaction Summary Definitions

155 *Add the following transactions to the IHE Technical Frameworks General Introduction list of Transactions:*

No new transactions.

Glossary

Add the following glossary terms to the IHE Technical Frameworks General Introduction Glossary:

160 No new glossary terms.

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Volume 1 – Profiles

Copyright Licenses

165 NA

Domain-specific additions

NA

Add the following to Section 1.7

170 1.7 History of Annual Changes

Added a Content Profile that defines the structure of the data that is collected to capture a patient’s eye care summary medical record.

- Eye Care Summary Record (EC-Summary)

175 *Add the following section to Section 2.2*

2.2.7 Eye Care Summary Record Content Profile

The Eye Care Summary Record (EC-Summary) consists of one content profile. This profile defines the structure of data that is collected for a patient’s eye care summary medical record, generally for the purpose of transfer or referral of care to another provider.

180 The United States Final Rule for Stage 2 of the EHR Incentive Program aka Meaningful Use (MU2) adopted the HL7 Consolidated CDA (C-CDA) Implementation Guide to exchange clinical documents (i.e., patient’s summary of care record, consultation notes, progress notes, etc.). The C-CDA defines specifications for many “general” medical sections such as medications, allergies, chief complaint, problems, and more. The Eye Care Summary Record
185 (EC-Summary) Content Profile specifies many of the same applicable general sections as defined in MU2 and in addition includes sections specific to a patient’s eye care summary medical record.

IHE Eye Care has decided to create a content profile that is a superset of the summary based C-CDA specification selected for MU2. It is a superset of the C-CDA Continuity of Care (CCD)
190 document.

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Add Section 9

9 Eye Care Summary Record (EC-Summary) Content Profile

195 The Eye Care Summary Record (EC-Summary) consists of one content profile. This profile defines the structure of data that is collected for a patient’s eye care summary medical record, generally for the purpose of transfer or referral of care to another provider.

200 The United States Final Rule for Stage 2 of the EHR Incentive Program aka Meaningful Use (MU2) adopted the HL7 Consolidated CDA (C-CDA) Implementation Guide to exchange clinical documents (i.e., patient’s summary of care record, consultation notes, progress notes, etc.). The C-CDA defines specifications for many “general” medical sections such as medications, allergies, chief complaint, problems, and more. The Eye Care Summary Record (EC-Summary) Content Profile specifies many of the same applicable general sections as defined in MU2 in addition to sections specific to eye care.

205 IHE Eye Care has decided to create a content profile that is a superset of the summary based C-CDA specification selected for MU2. It is a superset of the C-CDA Continuity of Care (CCD) document.

Note: Access to DICOM data (i.e., images, measurements, reports) is very important for the patient summary record. This capability is not defined in this content profile but IHE Eye Care highly recommends that a DICOM CD be available for the patient.

210

9.1 EC-Summary Actors, Transactions and Content Modules

This section defines the actors, transactions, and/or content modules in this profile. General definitions of actors are given in the Technical Frameworks General Introduction Appendix A at http://ihe.net/Technical_Frameworks/.

215 Figure 9.1-1 shows the actors directly involved in the EC-Summary Profile and the direction in which the content is exchanged.

220 A product implementation using this profile must group actors from this profile with actors from a workflow or transport profile to be functional. The grouping of the content module described in this profile to specific actors is described in more detail in the “Required Actor Groupings” section below.

225 There are two actors in this profile, the Content Creator and the Content Consumer. Content is created by a Content Creator and is consumed by a Content Consumer. The sharing or transmission of content from one actor to the other may be addressed by the appropriate use of IHE profiles described in the section on Content Bindings with XDS, XDM and XDR in PCC TF-2:4.1 and is out of scope of this profile.

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Figure 9.1-1: Actor Diagram

230 Table 9.1-1 lists the content module(s) defined in the EC-Summary Profile. To claim support for this profile, an actor shall support all required content modules (labeled “R”) and may support optional content modules (labeled “O”).

Table 9.1-1: EC-Summary Profile - Actors and Content Modules

Actors	Content Modules	Optionality	Reference
Content Creator	Eye Care Summary Record 1.3.6.1.4.1.19376.1.12.1.1.4	R	EyeCare TF-3: 6.3.1.3
Content Consumer	Eye Care Summary Record 1.3.6.1.4.1.19376.1.12.1.1.4	R	EyeCare TF-3: 6.3.1.3

235 **9.1.1 Actor Descriptions and Actor Profile Requirements**

Most requirements are documented in Transactions (Volume 2) and Content Modules (Volume 3). This section documents any additional requirements for this profile’s actors.

9.1.1.1 Content Creator

- 240 1. A Content Creator shall be able to create an eye care patient summary document according to the Eye Care Summary Record Document (1.3.6.1.4.1.19376.1.12.1.1.4) that is found in EYECARE TF-3 6.3.1.3.

9.1.1.2 Content Consumer

- 245 1. A Content Consumer shall be able to consume (receive and process) the Eye Care Summary Record Document (1.3.6.1.4.1.19376.1.12.1.1.4) that is found in EYECARE TF-3 6.3.1.3.
2. A Content Consumer shall implement the View Option or Discrete Data Import Option, or both.

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- 3. A Content Consumer that implements the Document Import or Section Import Option shall implement the View Option as well.
- 250 4. A Content Consumer that implements the View Option shall be able to:
 - a. Demonstrate rendering of the document for display.
 - b. Print the document.
 - c. Display the document with its original style sheet.
 - d. Support traversal of any links contained within the document.
- 255 5. A Content Consumer that implements the Document Import Option shall be able to:
 - a. Store the document.
 - b. Demonstrate the ability to access the document again from that storage.
- 6. A Content Consumer that implements the Section Import Option shall offer a means to import one or more document sections into the patient record as free text.
- 260 7. A Content Consumer that implements the Discrete Data Import Option shall offer a means to import structured data from one or more sections of the document.

9.2 EC-Summary Actor Options

Options that may be selected for each actor in this profile, if any, are listed in the Table 9.2-1. Dependencies between options when applicable are specified in notes.

265

Table 9.2-1: Eye Care Summary Record Options

Actor	Option	Section
Content Consumer	View Option (See Section 8.3.1.2)	PCC TF-2: 3.1.1
	Document Import Option (See Section 8.3.1.2)	PCC TF-2: 3.1.2
	Section Import Option (See Section 8.3.1.2 Note 1)	PCC TF-2: 3.1.3
	Discrete Data Import Option (See Section 8.3.1.2 Note 1)	PCC TF-2: 3.1.4
Content Creator	Shall implement the Eye Care Summary Document (1.3.6.1.4.1.19376.1.12.1.1.4).	EYECARE TF-3 6.3.1.3

9.3 Required Actor Groupings

270 This section describes the behaviors expected of the Content Creator and Content Consumer actors of this profile when grouped with actors of other IHE profiles. **No grouping rules are specified.**

IHE Eye Care recommends that the Content Creator and Content Consumer support at least one of the IHE and/or Direct Messaging exchange profiles.

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- IHE XDS, IHE XDR, IHE XDM
- 275 • XDR and XDM for Direct Messaging, Version 1, Finalized 9 March 2011

9.4 EC-Summary Overview

Change referenced section numbering when merged into technical framework

The Eye Care Summary Record (EC-Summary) consists of one content profile. This profile defines the structure of data that is collected for a patient’s eye care summary medical record.

280 EC-Summary is a customized extension of the C-CDA specifications chosen to align with MU2. This facilitates:

- a. Increasing interoperability with systems that support MU2
 - b. Reducing the burden on EHR systems that simultaneously support IHE Eye Care and MU2
- 285 c. Easing the burden for organizations incorporating eye care patient summary records into their EHRs

Although EC-Summary aligns with the summary based document specified by MU2 (i.e., Continuity of Care), IHE Eye Care does not determine whether or not systems support MU2. Vendors needs to verify themselves if they are both MU2 and EC-Summary compliant.

290 Note: Vendors are highly recommended to reference the MU2 requirements in order to determine compliance and cannot rely on IHE for this.

Vendors may create a C-CDA based Continuity of Care (CCD) document which can be used to satisfy MU2 and the IHE EC-Summary requirements simultaneously. Thus, an ophthalmologist or optometrist may provide the patient with a patient summary record which simultaneously

295 satisfies MU2 and contains sufficient eye care information to be useful. It is important for implementers to understand that they, and not IHE Eye Care, must take responsibility for MU2 compliance. IHE Eye Care EC-Summary documents enable, but do not assure, MU2 compliance because optionality may differ from MU2 requirements. For example, vendors may choose to generate MU2 documents without the additional EC-Summary information sections and also

300 offer a MU2 document with the additional EC-Summary information sections.

9.4.1 Concepts

9.4.2 Use Cases

Change referenced section numbering when merged into technical framework

305 Comprehensive eye care deals with a broad spectrum of subspecialty disciplines each with its own lexicon, examination techniques, and procedures. A patient presents for an examination and demographic data is created, retrieved from existing databases, or updated. The patient provides

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a chief complaint, general medical information, and historical information relevant to the eye, and a partial or complete examination of the eye and visual system is performed. Multiple people may contribute to this process including receptionist, technician, and physician.

310 The American Academy of Ophthalmology Preferred Practice Pattern for a Comprehensive Adult Medical Eye Evaluation provides a roadmap for data collection. The nature of the data varies widely and may be discrete and defined by existing terminology standards (e.g., visual acuity, intraocular pressure) or narrative and available only as free text (e.g., description of a lesion). After this data is collected the clinician will arrive at an assessment and management
315 plan. All of this must be recorded in a fashion that will allow subsequent transfer across diverse information platforms without loss of content or meaning using existing standards and protocols. IHE defines the General Eye Evaluation (GEE) Content Profile to document these patient encounters.

320 During the course of a patient’s care, services may be needed by a variety of subspecialty providers. The patient may need to move his/her care in part or whole to another provider. The safe and effective transfer or referral of an eye care patient to another provider requires an appropriate summary of the eye care record. IHE defines the Eye Care Summary Record (EC-Summary) Content Profile to document this summary record.

325 By its nature, this summary does not include all the details from each individual patient encounter (GEE). Therefore, if the organization providing healthcare services wishes to consume all the patient encounter information, the patient’s encounter documents (GEE) should be transferred as well as the patient’s summary (EC-Summary). The goal of this EC-Summary is to provide key historical data that will satisfy the needs of most eye care providers for care of a new
330 patient. The data in this summary document is not exhaustive, and may not satisfy the needs of all specialty providers. Nevertheless, the clinical summary is an important clinical tool for continuity of care, whether or not it is accompanied by all detailed patient encounter documentation. Even in the setting of ongoing care of a patient by a single provider, a succinct summary allows the provider to recognize in context important details that may otherwise be missed among the large volume of data in the medical record.

335 **9.4.2.1 Use Case #1: Glaucoma**

9.4.2.1.1 Glaucoma Use Case Description

Transfer of care for a glaucoma patient is especially dependent upon historical data. Determination of clinical targets for disease control requires careful review of multiple data
340 points over time and in relationship to each other, such as intraocular pressure, cup/disc ratio, optic disc hemorrhages, visual field, retinal nerve fiber layer thickness, pachymetry, eye medications, adverse drug reactions, etc. Ability to quickly review of all of these data points in proper context would greatly facilitate patient safety and quality care by the receiving eye care practitioner. The data points used in glaucoma management are especially important to include in a patient’s summary of care. Even if documentation of every past patient encounter is included in

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345 the transfer of records, these data points can be difficult to find and evaluate if a succinct
summary is not provided.

9.4.2.2 Use case #2: Complete Transfer of Patient Care

9.4.2.2.1 Complete Transfer of Care Description

350 When circumstances require a complete transfer in care from one provider to another, continuity
of care can be possible only with a complete transfer of the patient’s medical data. There is no
substitute for a comprehensive transfer of all patient encounter content accumulated during the
course of the patient’s care by the transferring provider. However, a succinct summary of this
information is still important to provide the receiving provider a proper understanding of the
patient’s key status and needs.

9.4.2.3 Use Case #3: Provider or practice migrates to a new EHR

9.4.2.3.1 Provider or practice migrates to new EHR Description

360 The ophthalmic community has a large installed user base of a wide variety of EHRs. For
reasons including evolving regulatory constraints, market influence, and personal preference
providers are frequently choosing to migrate from one eye care EHR to another. Ideally a
provider would want all of the data collected in his/her current EHR to migrate to the new one,
but this has proven to be difficult and costly even when similar data elements are being stored by
the various EHRs. The EC-Summary Profile provides a data migration option for conforming
eye care EHRs. The goal of this profile is to provide key data that will satisfy the needs of most
eye care providers for ongoing care of their patients. The data in this summary document is not
365 exhaustive, and may not satisfy the needs of all specialty providers when migrating from one
EHR system to another.

9.4.2.4 Use Case #4: Sending or receiving EHR is not able to create or import discrete data elements found in Eye Care CDAs

9.4.2.4.1 Sending or receiving EHR is not able to create or import discrete data elements found in Eye Care CDAs Description

370 Various EHRs may conform to specifications for GEE or EC-Summary profiles to different
degrees. Some may be able to create or import every data element specified, and some may only
be able to create or receive a viewable document. In the latter case the receiving EHR would
only be able to receive and display the document, and would not be able to import the discrete
375 data elements (e.g., intraocular pressure measurements over time) into the appropriate locations
in its own database.

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9.5 EC-Summary Security Considerations

The security considerations for a content module are dependent upon the security provisions defined by the grouped actor(s).

380 **9.6 EC-Summary Cross Profile Considerations**

A Content Creator of EC-Summary might be grouped with a Content Creator of GEE so that it has the ability to generate a patient's encounter document.

A Content Consumer of EC-Summary might be grouped with a Content Consumer of GEE so that it has the ability to consume a patient's encounter document.

385

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Volume 2 – Transactions

NA

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Volume 3 – Content Modules

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5 Namespaces and Vocabularies

Add to Section 5 Namespaces and Vocabularies

codeSystem	codeSystemName	Description
1.3.6.1.4.1.19376.1.5.3.1	IHE PCC Template Identifiers	This is the root OID for all IHE PCC Templates. A list of PCC templates can be found in IHE PCC TF-2:6.3 (CDA Release 2.0 Content Modules).
2.16.840.1.113883.6.1	LOINC	Logical Observation Identifier Names and Codes
2.16.840.1.113883.6.96	SNOMED CT	SNOMED Controlled Terminology
1.2.840.10008.2.16.4	DCM	DICOM Controlled Terminology; PS 3.16 Content Mapping Resource, Annex D
1.3.6.1.4.1.19376.1.12.1	IHE Eye Care Template Identifiers	This is the root OID for all IHE Eye Care Templates.
1.3.6.1.4.1.19376.1.4.1	IHE Cardiology Template Identifiers	This is the root OID for all IHE Cardiology Templates.

395

Add to Section 5.1.1 IHE Format Codes

The table below lists the format codes, root template identifiers and media types used by the IHE Profiles specified in the Eye Care Technical Framework.

Note: The code system for these codes is **1.3.6.1.4.1.19376.1.2.3** as assigned by the ITI Domain for codes used for the purposes of cross-enterprise document sharing (XDS).

400

Profile	Format Code	Media Type	Template ID
General Eye Evaluation (GEE) C-CDA Progress Note	urn:ihe:eyecare:geneyeevalpn:2014	text/xml	1.3.6.1.4.1.19376.1.12.1.1.2
General Eye Evaluation (GEE) C-CDA Consultation Note	urn:ihe:eyecare:geneyeevalcn:2014	text/xml	1.3.6.1.4.1.19376.1.12.1.1.3
<u>Eye Care Summary Record (EC-Summary)</u>	<u>urn:ihe:eyecare:summary:2015</u>	<u>text/xml</u>	<u>1.3.6.1.4.1.19376.1.12.1.1.4</u>

Add to Section 5.1.2 IHE ActCode Vocabulary

405 NA

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Add to Section 5.1.3 IHE RoleCode Vocabulary

NA

Update Section 6

410

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6 Content Modules

6.3 CDA Release 2 Content Modules

6.3.1 CDA Document Content Modules

415 **6.3.1.1 General Eye Evaluation (GEE) C-CDA Progress Note Document Content Module) (1.3.6.1.4.1.19376.1.12.1.1.2)**

.....

6.3.1.2 General Eye Evaluation (GEE) C-CDA Consult Note Document Content Module) (1.3.6.1.4.1.19376.1.12.1.1.3)

.....

420 **6.3.1.3 Eye Care Summary Record (EC-Summary) Document Content Module (1.3.6.1.4.1.19376.1.12.1.1. 4)**

The Eye Care Summary Record (EC-Summary) is a content profile that defines the structure of data that is contained in a patient’s eye care summary medical record. It is designed to be an extension to the C-CDA Continuity of Care (CCD) document.

- 425
1. The templateId/@root for conformance to this document SHALL be 1.3.1.4.1.19376.1.12.1.1.4 to assert conformance to this template.
 2. The ClinicalDocument/code LOINC code for the document SHALL be appliedforvalue, “Eye Care Summary Note”.
 - 430 3. The XDSDocumentEntry format code for this content SHALL be urn:ihe:eyecare:summary:2015.
 4. The mapping of CDA header attributes to XDS metadata SHALL be identical to the XDS-MS mapping specified in PCC TF-2: 4.1.1. EC-Summary specific extensions are shown in Section 6.3.1.3.3.

6.3.1.3.1 Parent Template

435 The EC-Summary clinical document is an extension to the C-CDA Continuity of Care (CCD) document. Therefore, the parent of this document template shall be:

1. C-CDA Continuity of Care “2.16.840.1.113883.10.20.22.1.2”

Note: Implementations may support other parent templates in addition to the CCD.

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6.3.1.3.2 Relationship to C-CDA

440 Some CDA sections and entries used within this EC-Summary document are based on the HL7
Implementation Guide for CDA Release 2: IHE Health Story Consolidation, Release 1 DSTU
(C-CDA) section and entry definitions. Specifically, it is a superset of the C-CDA Continuity of
Care.

445 If there are no new or modified constraints for a section or entry or if only the value sets are
constrained, then the definition of the section or entry is considered unchanged from the C-CDA
definition and the C-CDA template ID will be used. These unchanged sections/entries are
referenced directly to the C-CDA specification and are not included in this specification.

6.3.1.3.3 XDS Metadata Extensions for EC-Summary

This section specifies extensions to the XDS metadata requirements defined by IHE ITI.

- 450
1. The XDSDocumentEntry classCode LOINC code for the class SHALL be appliedforvalue, “Eye Care Summary Note”.
 2. The XDSDocumentEntry practiceSettingCode for this content SHALL be appliedforvalue, LOINC, “Eye Care”
 - 455 3. The XDSDocumentEntry typeCode LOINC code for the typeCode SHALL be 28619-5, “Ophthalmology/Optometry Studies (set)”.
 4. The XDSDocumentEntry typeCode code for the authorSpecialty SHALL use SNOMED CT to identify the specialty of the author.
 - a. The following codes are provided to express the scope of this attribute; additional SNOMED CT codes MAY be used.

460

SNOMED CT code
422234006, SNOMED CT, Ophthalmologist (occupation)
28229004, SNOMED CT, Optometrist (occupation)

6.3.1.3.4 Eye Care Summary Header Section

1. SHALL conform to the C-CDA Continuity of Care Header Constraints specified in Section 3.1.1 of the HL7 Implementation Guide for CDA® Release 2: IHE Health Story Consolidation, DSTU Release 1.1 (US Realm) Draft Standard for Trial Use July 2012.

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465 **6.3.1.3.5 Eye Care Summary Specification**

The following table defines the Document Content specification requirements.

Table 6.3.1.3.5-1: Eye Care Summary Record Document Content Specification

Template Name	OPT	Template Id	Additional Requirements or Comments
CDA Header Modules	M[1..1]	See Section 6.3.1.3.4	
Advanced Directive (entries optional)	O[0..1]	2.16.840.1.113883.10.20.22.2.21	
Allergies (entries required)	R[1..1]	2.16.840.1.113883.10.20.22.2.6.1	
Encounters (entries optional)	O[0..1]	2.16.840.1.113883.10.20.22.2.22	
Encounters (entries required)	R[1..1]	2.16.840.1.113883.10.20.22.2.22.1	This section is not specified in the C-CDA CCD but required for EC-Summary.
Family History	R[0..1]	2.16.840.1.113883.10.20.22.2.15	This section is optional in the C-CDA CCD but required for EC-Summary.
Functional Status	R[0..1]	2.16.840.1.113883.10.20.22.2.14	This section is optional in the C-CDA CCD but required for EC-Summary.
Immunizations (entries optional)	O[0..1]	2.16.840.1.113883.10.20.22.2.2	
Medical Equipment	O[0..1]	2.16.840.1.113883.10.20.22.2.23	
Medications (entries required)	R[1..1]	2.16.840.1.113883.10.20.22.2.1.1	
Payers	O[0..1]	2.16.840.1.113883.10.20.22.2.18	
Plan of Care	O[0..1]	2.16.840.1.113883.10.20.22.2.10	
Problem (entries required)	R[1..1]	2.16.840.1.113883.10.20.22.2.5.1	
Procedure (entries required)	R[0..1]	2.16.840.1.113883.10.20.22.2.7.1	
Results (entries required)	R[0..1]	2.16.840.1.113883.10.20.22.2.3.1	
Social History	R[0..1]	2.16.840.1.113883.10.20.22.2.17	This section is optional in the C-CDA CCD but required for EC-Summary.
Vital Signs (entries optional)	O[0..1]	2.16.840.1.113883.10.20.22.2.4	
Surgery Description	R[0..1]	2.16.840.1.113883.10.20.22.2.26	This section is expected to be an accumulated list of surgeries.
Coded List of Surgeries (accumulated list of surgeries)	O[0..1]	1.3.6.1.4.1.19376.1.5.3.1.3.12	This section is expected to be an accumulated list of surgeries.
Ocular History	R[0..1]	1.3.6.1.4.1.19376.1.12.1.2.3	Note: Able to include a narrative description and coded Ocular Surgeries/Procedures, with dates, etc.
Ocular Encounters Summary	R[1..*]	1.3.6.1.4.1.19376.1.12.1.2.20	

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Example XML Code

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470 ClinicalDocument xmlns='urn:hl7-org:v3' >
    <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
    <templateId root='2.16.840.1.113883.10.20.22.1.2'/>
    <templateId root='1.3.6.1.4.1.19376.1.12.1.1.4'/>
    <id root=' ' extension=' '/>
475 <code code='68887-9' displayName='General eye evaluation'
    codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC' />
    <title> Eye Care Summary Note</title>
    <effectiveTime value='20151004012005'/>
480 <confidentialityCode code='N' displayName='Normal'
    codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />
    <languageCode code='en-US' />
    :
    <component>
485     <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.21' />
        <!-- Optional Advanced Directive Section content -->
    </section>
    </component>

490 <component>
    <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.6.1' />
        <!-- Required Allergies Section content -->
495 </section>
    </component>

    <component>
    <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.22' />
500 <!-- Optional Encounters Section content -->
    </section>
    </component>

    <component>
    <section>
505 <templateId root='2.16.840.1.113883.10.20.22.2.22.1' />
        <!-- Required Encounters Section content -->
    </section>
    </component>

510 <component>
    <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.15' />
515 <!-- Required if known Family History Section content -->
    </section>
    </component>

    <component>
    <section>
520 <templateId root='2.16.840.1.113883.10.20.22.2.14' />
        <!-- Required if known Functional Status Section content -->
    </section>
    </component>

525 <component>
    <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.2' />
        <!-- Optional Immunizations Section content -->
530 </section>
    </component>

```

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```

535   <component>
      <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.23' />
        <!-- Optional Medical Equipment Section content -->
      </section>
    </component>

540   <component>
      <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.1.1' />
        <!-- Required Medications Section content -->
      </section>
545 </component>

      <component>
        <section>
          <templateId root='2.16.840.1.113883.10.20.22.2.18' />
          <!-- Optional Payers Section content -->
550 </section>
        </component>

555 <component>
      <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.10' />
        <!-- Optional Plan of Care Section content -->
      </section>
    </component>

560 <component>
      <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.5.1' />
        <!-- Required Problems Section content -->
565 </section>
    </component>

      <component>
        <section>
          <templateId root='2.16.840.1.113883.10.20.22.2.7.1' />
          <!-- Required if Known Procedure Section content -->
570 </section>
        </component>

575 <component>
      <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.3.1' />
        <!-- Required if Known Results Section content -->
      </section>
580 </component>

      <component>
        <section>
          <templateId root='2.16.840.1.113883.10.20.22.2.17' />
          <!-- Required if known Social History Section content -->
585 </section>
        </component>

```

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```

590 <component>
      <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.4' />
        <!-- Optional Vital Signs Section content -->
      </section>
    </component>
595
    <component>
      <section>
        <templateId root='2.16.840.1.113883.10.20.22.2.26' />
        <!-- Required if known Surgery Description Section content -->
600      </section>
    </component>

    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.12' />
        <!-- Optional Coded List of Surgeries Section content -->
605      </section>
    </component>

    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.12.1.2.3' />
        <!-- Required if known Ocular History Section content -->
610      </section>
    </component>
615

    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.12.1.2.20' />
        <!-- Required Ocular Encounters Summary Section content -->
620      </section>
    </component>

625 </structuredBody></component>
    </ClinicalDocument>

```

6.3.2 CDA Section Content Modules

.....

630 6.3.2.20 Ocular Encounter Summary 1.3.6.1.4.1.19376.1.12.1.2.20

Template ID	1.3.6.1.4.1.19376.1.12.1.2.20			
Parent Template				
General Description	The ocular encounter section shall contain summary information from patient’s eye care encounters.			
Section Code	appliedforvalue, LOINC, “Ocular Encounter Summary”			
Opt	Data Element or Section Name	Template ID	Specification Document	Constraint
Subsections				

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IHE Eye Care Technical Framework Supplement – Eye Care Summary Record (EC-Summary)

C[1..1]	Assessment and Plan	2.16.840.1.113883.10.20.22.2.9	HL7 C-CDA	Shall include an Assessment and Plan Section or an Assessment Section and a Plan Section.
C[1..1]	Assessment	2.16.840.1.113883.10.20.22.2.8	HL7 C-CDA	Shall include an Assessment and Plan Section or an Assessment Section and a Plan Section.
C[1..1]	Plan of Care	2.16.840.1.113883.10.20.22.2.10	HL7 C-CDA	Shall include an Assessment and Plan Section or an Assessment Section and a Plan Section.
R[0..1]	Intraocular Pressure	1.3.6.1.4.1.19376.1.12.1.2.2	EYECARE TF-2: 6.3.2.11	
R[0..1]	Refractive Measurements	1.3.6.1.4.1.19376.1.12.1.2.9	EYECARE TF-2: 6.3.2.9	
R[0..1]	Lensometry Measurements	1.3.6.1.4.1.19376.1.12.1.2.10	EYECARE TF-2: 6.3.2.10	
R[0..1]	Ophthalmic Medications	1.3.6.1.4.1.19376.1.12.1.2.4	EYECARE TF-2: 6.3.2.4	
R[0..1]	Visual Acuity	1.3.6.1.4.1.19376.1.12.1.2.7	EYECARE TF-2: 6.3.2.8	If Known, shall contain one set of Visual Acuity fields based upon the following observation/code priority list: 1 – 419775003, SNOMED CT, Best Corrected Visual Acuity 2 - 111686, DCM, Habitual Visual Acuity 3- 420050001, SNOMED CT, Uncorrected Visual Acuity If the observation/code is not one of the above codes, this section shall not be included.
R[0..1]	Posterior Segment	1.3.6.1.4.1.19376.1.12.1.2.18	EYECARE TF-2: 6.3.2.17	If known, shall be included if the observation/code contains one or more of the following values: 637369018, SNOMED CT, Optic cup/disc ratio observable, 370937003, SNOMED CT, Vertical cup/disc ratio observable, 370938008, SNOMED CT, Horizontal cup/disc ratio observable

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Example XML Code

```
635 <component>
    <section>
        <templateId root='1.3.6.1.4.1.19376.1.12.1.2.20' />
        <id root=' ' extension=' ' />
        <code code='appliedforvalue' displayName='Ocular encounter summary'
640         codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC' />
        <text>
            Text as described above
        </text>

645     <component>
        <section>
            <templateId root='2.16.840.1.113883.10.20.22.2.9' />
            <!-- Conditional Assessment and Plan Section content -->
        </section>
    </component>

650     <component>
        <section>
            <templateId root='2.16.840.1.113883.10.20.22.2.8' />
            <!-- Conditional Assessment Section content -->
655     </section>
    </component>
```

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660

```
<component>
  <section>
    <templateId root='2.16.840.1.113883.10.20.22.2.10' />
    <!-- Conditional Plan of Care Section content -->
  </section>
</component>
```

665

```
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.12.1.2.2' />
    <!--Required if Known Intraocular Pressure Section content -->
  </section>
</component>
```

670

```
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.12.1.2.9' />
    <!--Required if Known Refractive Measurements Section content -->
  </section>
</component>
```

675

680

```
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.12.1.2.10' />
    <!--Required if Known Lensometry Measurements Section content -->
  </section>
</component>
```

685

```
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.12.1.2.4' />
    <!--Required if Known Ophthalmic Medications Section content -->
  </section>
</component>
```

690

```
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.12.1.2.7' />
    <!--Required if Known Visual Acuity Section content -->
  </section>
</component>
```

695

700

```
<component>
  <section>
    <templateId root='1.3.6.1.4.1.19376.1.12.1.2.18' />
    <!--Required if Known Posterior Segment Section content -->
  </section>
</component>
```

705

```
</section>
</component>
```

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