Integrating the Healthcare Enterprise

5

Quality, Research and Public Health (QRPH)

Technical Framework Supplement

Physician Reporting to a Public Health Repository – Cancer Registry (PRPH-Ca)

10

Trial Implementation

15

Date: September 2, 2011

Author: Wendy Scharber, RHIT, CTR, Wendy Blumenthal, MPH

Email: qrph@ihe.net

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20 # Foreword

This is a supplement to the IHE Quality, Research and Public Health (QRPH) Trial Implementation Technical Framework. Each supplement undergoes a process of public comment and trial implementation before being incorporated into the volumes of the Technical Frameworks.

25 This supplement is submitted for Trial Implementation as of September 2, 2011 and will 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 QRPH Final Text Technical Framework. Comments are invited and can be submitted at http://www.ihe.net/qrph/qrphcomments.cfm or by email to qrph@ihe.net.

30 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.

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

Replace Section X.X by the following:

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

40 Information about the IHE QRPH domain can be found at: http://www.ihe.net/Domains/index.cfm

Information about the structure of IHE Technical Frameworks and Supplements can be found at: http://www.ihe.net/About/process.cfm and http://www.ihe.net/profiles/index.cfm

The current version of the IHE Technical Framework can be found at:
45 http://www.ihe.net/Technical_Framework/index.cfm

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Introduction

This supplement is written for Trial Implementation. It is written as an addition to the Trial
130 Implementation Quality, Research and Public Health Technical Framework.

This profile has been revised substantially from the 11/4/2010 version.

This supplement also references the following documents[1]. The reader should review these documents as needed:

1. IT Infrastructure Technical Framework Volume 1, Revision 8.0
2. IT Infrastructure Technical Framework Volume 2, Revision 8.0
3. IT Infrastructure Technical Framework Volume 3, Revision 8.0
4. IHE Glossary
5. HL7 and other standards documents referenced in Volume 1 and Volume 2

Profile Abstract

Until recently, complete and high quality cancer reporting has been achieved primarily through hospital cancer registries. Traditionally, cancer patients receive diagnostic testing or work-up and/or treatment in hospitals. However, advances in medicine now allow patients to obtain their care outside the acute care hospital setting. Data collection systems from other sources such as physician offices are not as consistent with reporting. This leads to under-reporting of certain types of cancers, typically those now diagnosed and treated outside the acute care hospital setting. Both melanomas and prostate cancers, for example, have been shown to be under-reported when central registries rely only on hospital reporting.

In many states, these non-hospital data sources are only minimally involved in reporting to the central cancer registry although the numbers are increasing each year. When reporting does occur, it may be through a manual process of identifying reportable cases and submitting copies of the medical record, or the central registry may send certified tumor registrars (CTR) to clinics or physician offices[2] to manually abstract the information from the paper-based medical records. These processes are very resource-intensive, time-consuming, and vulnerable to errors in transcription.

[1] The first three documents can be located on the IHE Website at http://www.ihe.net/Technical_Framework/index.cfm#IT. The remaining documents can be obtained from their respective publishers.

[2] For purposes of this profile, clinic/physician offices has been defined as any health care practitioner, e.g., physician or dental offices, who would be required by state regulation to report a cancer case to the central cancer registry.

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The need to access the data contained in clinics/physician offices with only limited resources is driving the effort to develop an automated electronic process to identify and report cancer cases using the clinic/physician office electronic medical record (EMR).

The Physician Reporting to a Public Health Repository – Cancer Registry Profile provides a means through which physician office EMR systems can report information on cancer patients to the public health cancer registry. A single, consistent method allows efficient and accurate exchange of information while reducing the burden on EMR system-specific or registry-specific implementations.

Open Issues and Questions

1. Work with Germany to harmonize the Cancer Diagnosis Section during the next cycle.
2. Obtain LOINC Code for Cancer Diagnosis Entry. (requested from LOINC July 10,2011)
3. The LOINC codes for TNM stage are pre-coordinated to be Clinical or Pathologic. A set of LOINC codes that generically defines the T, N, M value with a qualifier for the descriptor (clinical or pathologic) should be considered.
4. Need to determine how to list value sets for AJCC Staging Manual. This is a proprietary coding scheme that is used internationally for cancer diagnoses.
5. The authors are continuing to work on Level 3 Entry content documentation. Resolution of some issues may require coordination with PCC Technical Committee. If issues are not resolved before October 1st, then this profile will be subject to level 2 testing only, which means that content consumers cannot be guaranteed to have level 3 content that can be consumed for semantic interoperability purposes. These issues will be resolved before the profile goes to final text and will remain in trial implementation until validation requirements are met.

Closed Issues

NA

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Volume 1 – Profiles

Add the following to section 1.n

1.n Copyright Permissions

190 *Add the following to section 2.5*

1.5 Dependencies of the QRPH Integration Profiles

<Profile Name>	<?>	<?>	<->

None.

Add the following to section 2.7

195 None.

1.7 History of Annual Changes

1. Added the PRPH-Ca Integration Profile

200

Add Section X

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X Physician Reporting to a Public Health Repository – Cancer Registry Profile

The Physician Reporting to a Public Health Repository – Cancer Registry Profile defines the data elements to be retrieved from the electronic medical record EMR and transmitted to the cancer registry or to a healthcare provider.

Until recently, complete and high quality cancer reporting has been achieved primarily through hospital cancer registries. Traditionally cancer patients receive diagnostic testing or work-up and/or treatment in hospitals. However, advances in medicine now allow patients to obtain their care outside the acute care hospital setting. Data collection systems from other sources such as physician offices are not as consistent with reporting. This leads to under-reporting of certain types of cancers, typically those now diagnosed and treated outside the acute care hospital setting. Both melanomas and prostate cancers, for example, have been shown to be under-reported when central registries rely only on hospital reporting.

In many states, these non-hospital data sources are only minimally involved in reporting to the central cancer registry although the numbers are increasing each year. When reporting does occur, it may be through a manual process of identifying reportable cases and submitting copies of the medical record, or the central registry may send certified tumor registrars (CTR) to clinics or physician offices[3] to manually abstract the information from the paper-based medical records. These processes are very resource-intensive, time-consuming, and vulnerable to errors in transcription.

The need to access the data contained in clinics/physician offices with only limited resources is driving the effort to develop an automated electronic process to identify and report cancer cases using the clinic/physician office EMR.

The scope of this profile is to define the data elements required for clinic/physician office reporting to a public health cancer registry[4].

X.1 PRPH-Ca Process Flow

X.1.1 Use Cases

Scenario:

Use Case 1

[3] For purposes of this profile, clinic/physician offices has been defined as any health care practitioner, e.g., physician or dental offices, who would be required by state regulation to report a cancer case to the central cancer registry.

[4] In the USA extension of this supplement, the scope is restricted to clinician reporting to a state/territorial cancer registry. State/territorial cancer registry reporting to the national cancer programs (CDC and SEER) are out of scope.

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Patricia Patient visits her primary care physician to be evaluated for a very small skin mole that has changed color. The physician takes a small specimen where it is examined within his own laboratory and determines it is a malignant melanoma. He fully excises the mole from Patricia's arm and verifies under the microscope that he has removed the entire cancer. The patient leaves the physician office requiring no further care. The Physician documents the encounter in the medical record.

The EMR checks to see if the diagnosis meets the criteria for reporting to the state cancer registry. Meeting the criteria, the EMR automatically creates a cancer registry report as specified in this profile (PRPH-Ca) and sends it directly to the public health cancer registry.

Alternative Action:

The EMR checks to see if the diagnosis meets the criteria for reporting to the state cancer registry. Meeting the criteria, the EMR retrieves a pre-populated (pre-pop) form with available information and presents the form to the physician to complete the remaining required information. The information from the completed form is sent to the public health cancer registry as a PRPH-Ca CDA document. This use case may be invoked when the EMR does not contain sufficient data to generate the registry report and/or when the physician chooses to have the opportunity to manually review cancer reports before they are sent to the public health cancer registry.

Use Case 2

Patricia Patient visits her primary care physician to be evaluated for a very small skin mole that has changed color. The physician determines it is most likely a malignant melanoma. He refers patient to a dermatologist for treatment. The patient leaves the physician office receiving no further care for the cancer diagnosis. The Physician documents the encounter in the medical record.

The EMR checks to see if the diagnosis meets the criteria for reporting to the state cancer registry. Meeting the criteria, the EMR automatically creates a cancer registry report as specified in this profile (PRPH-Ca) and sends it directly to the public health cancer registry AND to the dermatologist.

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X.1.2 Diagrams

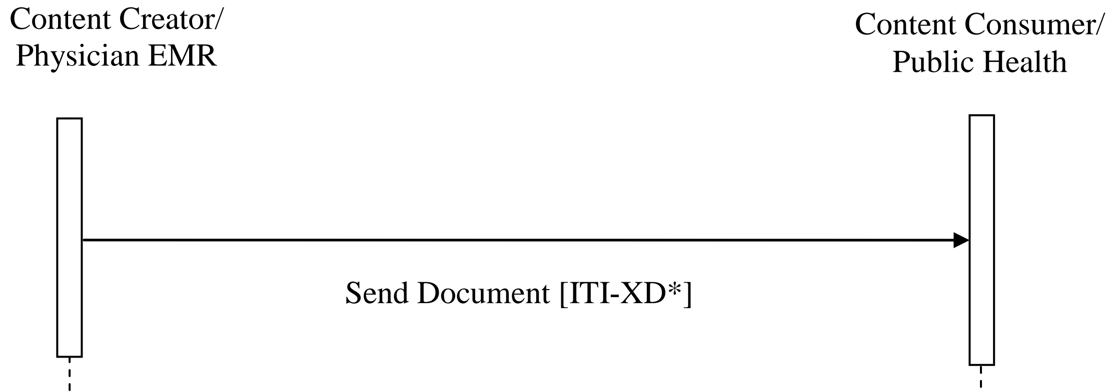

Figure X.1.2-1. Use Case 1: Automated Reporting

265

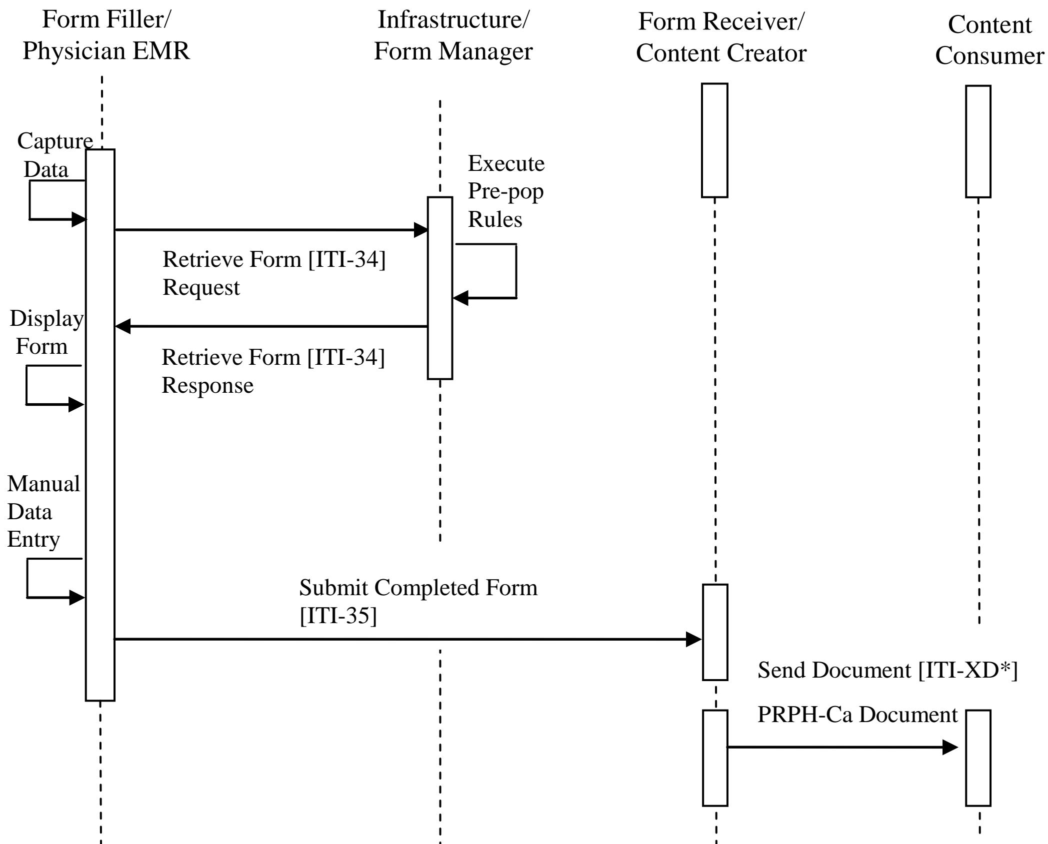

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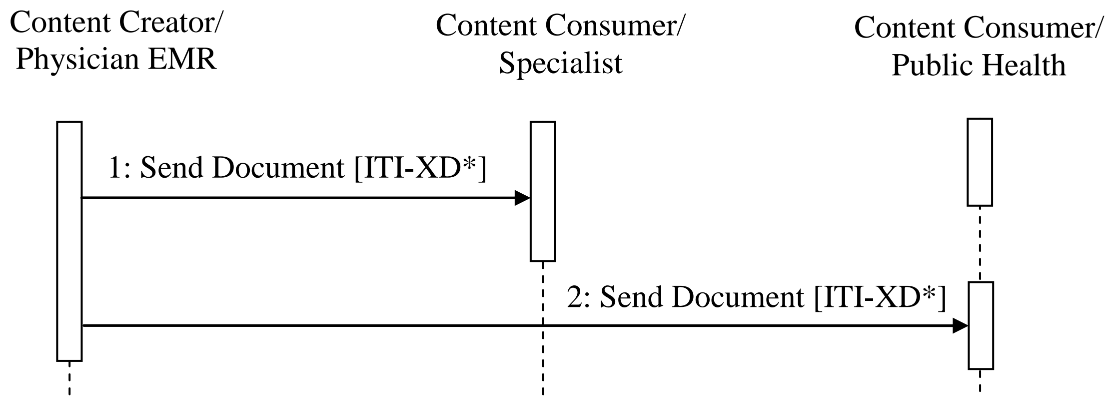
Figure X.1.2-2. Use Case 1: Alternative Action – Physician Interaction Reporting



270

Figure X.1.2-3. Use Case 2: Referral to Specialist

X.2 PRPH-Ca Actors/Transactions

275 This profile defines content for Physician Reporting for Public Health - Cancer and two different mechanisms for delivering that content. In the first mechanism, a Content Creator delivers the PRPH-Ca document to a Content Consumer using a mechanism that is not defined by this profile. It is possible to use any of the transport mechanisms defined by the IHE XD* profiles or by some other mechanism supported by the Content Creator and Content Consumer. The second 280 mechanism specifically requires the use of the ITI-RFD profile coupled with final delivery involving a Content Creator and a Content Consumer.

Figure X.3-1 shows both mechanisms in the same diagram. The only cross-over between the two mechanisms is that the final content delivered to the Content Consumer will be a valid PRPH-Ca document. The actors shown in Figure X.3-1 are directly involved in the PRPH-Ca Profile. 285 Actors that may be indirectly involved due to their participation in other profiles are not shown.

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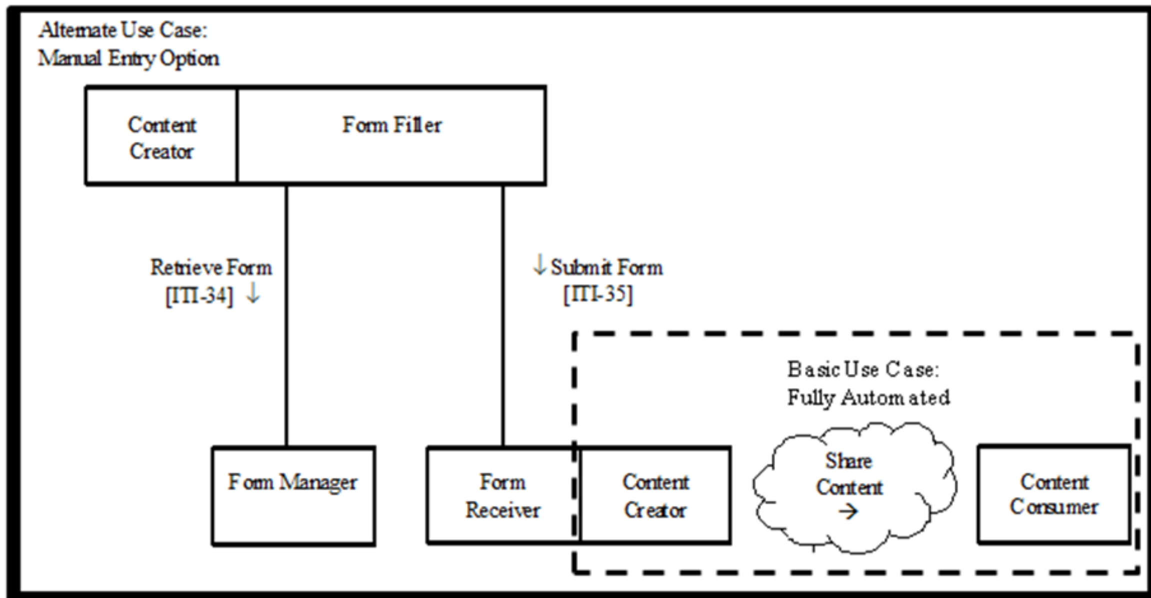

Figure X.2-1 Actor Diagram

290

Table X.2-1 lists the transactions for each actor directly involved in the PRPH-Ca Profile. In order to claim support of this Profile, an implementation must perform the required transactions (labeled "R"). Transactions labeled "O" are optional. A complete list of options defined by this Profile and that implementations may choose to support is listed in Volume 1, Section X.4.

295

Table X.2-1. PRPH-Ca Profile - Actors and Transactions

Actors	Transactions	Optionality	Section in Vol. 2
Content Creator	None		
Content Consumer	None		
Content Creator/Form Filler	Retrieve Form [ITI-34]	R	ITI TF-2b: 3.34
	Submit Form [ITI-35]	R	ITI TF-2b: 3.35
Content Creator/Form Receiver	Submit Form [ITI-35]	R	ITI TF-2b: 3.35
Form Manager	Retrieve Form [ITI-34]	R	ITI TF-2b: 3.34

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X.2.1 Actor Descriptions and Requirements

This section describes the specific requirements for each Actor defined within this profile.

X.2.1.1 Content Creator

300 A Content Creator SHALL be able to create a Cancer Reporting Extract according to the specification Physician Reporting to Public Health Repository – Cancer Registry Profile found in QRPH TF-2. Optionally, a Content Consumer may implement either of the following options:

- Automated option: Creates the CDA R2 content document specified by the PRPH-Ca profile.
- Prepop option: Groups with RFD: Form Filler to supply a valid PRPH-Ca content document
305 as prepop data for a requested form.
- Receive Form option: Groups with RFD: Form Receiver to accept a populated form which supplies data to be used to create a valid PRPH-Ca content document.

X.2.1.2 Content Consumer

A Content Consumer SHALL be able to consume a Cancer Reporting Extract by implementing
310 **one** or more of the following Options:

- Document Import option;
- Section Import option;
- Discrete Data Import option.
  - A Content Consumer that implements the Discrete Data Import Option may offer a
315 means to import structured data from one or more sections of the document/
- Content Consumer may implement the View Option.

X.2.1.3 Form Manager

The actions of the Form Manager are defined in the ITI RFD Profile.

In the PRPH-Ca Profile, the Form Manager shall accept the pre-population content defined by
320 the Physician Reporting to Public Health Repository – Cancer Registry Profile and found in QRPH TF-2, and pre-populate the form as defined in Volume 4, Tables 1.2.1-1 and 1.2-1.

X.3 PRPH-Ca Options

Options that may be selected for this Profile are listed in the table X.4-1 along with the Actors to which they apply. Dependencies between options when applicable are specified in notes.

325

Table X.3-1. Physician Reporting to Public Health Repository – Cancer Registry Profile Actors and Options

Actor	Option	Section

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Actor	Option	Section
Content Consumer	View Option (See Note 1) Document Import Option (See Note 1) Section Import Option (See Note 1) Discrete Data Import Option (See Note 1)	PCC TF-2: 3.1.1 PCC TF-2: 3.1.2 PCC TF-2: 3.1.3 PCC TF-2: 3.1.4
Content Creator	Automated	
Content Creator (grouped with Form Filler)	Prepop	
Content Creator (grouped with Form Receiver)	Receive Form	
Form Manager	No options defined	

Note 1: The Actor SHALL support at least one of the defined options.

330

X.4 PRPH-Ca Actor Groupings and Profile Interactions

X.4.1 Recommended Grouping with XDS.b, XDM, or XDR

The use of the IHE XD* family of transactions is encouraged to support standards-based interoperability between systems acting as the PRPH-Ca: Content Creator and PRPH-Ca: Content Consumer. However, this profile does not require any groupings with ITI XD* actors to
335 facilitate transport of the content document it defines. Below is a summary of *recommended* IHE transport transactions that MAY be utilized by systems playing the roles of PRPH-Ca: Content Creator or PRPH-Ca: Content Consumer to support the standard use case defined in this profile:

- A registry/repository-based infrastructure is defined by the IHE Cross Enterprise Document Sharing (XDS.b) and other IHE Integration Profiles such as patient identification (PIX &
340 PDQ) and notification of availability of documents (NAV).
- A media-based infrastructure is defined by the IHE Cross Enterprise Document Media Interchange (XDM) profile.
- A reliable messaging-based infrastructure is defined by the IHE Cross Enterprise Document Reliable Interchange (XDR) profile.
345
- All of these infrastructures support Security and privacy through the use of the Consistent Time (CT) and Audit Trail and Node Authentication (ATNA) profiles.

Detailed description of these transactions can be found in the IHE IT Infrastructure Technical Framework.

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X.4.2 Content Creator Grouping with RFD: Form Filler – Mandatory for Content Creators with Prepop Option

When the Content Creator Prepop option is selected, this profile specifies a mandatory grouping of the Content Creator Actor with the RFD: Form Filler Actor. The prepop data is created by Content Creator Actor according to the PRPH-Ca document. The Form Filler is responsible for sending the prepop data to the Form Manager. The grouping permits a single system to implement the combined capability.

X.4.3 Content Creator Grouping with RFD: Form Receiver - Mandatory for Content Creator with Receive Form Option

When the Content Creator Receive Form option is selected, this profile specifies a mandatory grouping of a Content Creator Actor with an RFD: Form Receiver. Form data is passed to the grouped Content Creator using a mechanism that it can perform as a result of being grouped with an RFD: Form Receiver. The Content Creator uses the data coming in the form to create a CDA Document that conforms to the PRPH-Ca content document specifications.

X.4.4 Sharing Value Set (SVS)

A Content Creator Actor and Content Consumer Actor may support the Sharing Value Set (SVS) Integration Profile in order to use a common uniform managed vocabulary.

X.5 PRPH-Ca Security Considerations

This profile communicates patient identifiable health information between the Clinical Data Source and the public health repository. To secure this information, this profile requires the use of the IHE security profiles found in ITI TF-1. Refer to the IHE IT Infrastructure Technical Framework (IHE-TF) for details relating to specific transactions.

X.6 PRPH-Ca Content Modules

Data elements that may be included in the Physician Report to Cancer Registry

Data Element
Date Case Report Exported
Patient Name (First, Middle, Last)
Patient Street Address (City, State, Zip Code, Country)
Address History
Patient Telephone
Patient Sex/Gender
Patient Date of Birth

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Data Element
Patient Medical Record Number
Patient Social Security Number
Patient Race
Patient Ethnicity
Patient Birth Place (City, State, Country)
Patient Marital Status
Physician Name
Physician Address
Provider Organization (Name and ID)
Provider Referred From
Coded Social History Section
Social History Narrative
Occupation
Industry
History of Tobacco Use
Payers Section
Primary Payer at Diagnosis
Cancer Diagnosis Section
Cancer Diagnosis Entry
Diagnosis Date
Histology
Behavior
Best Method of Confirmation (Diagnostic confirmation)
Primary Site
Laterality
Stage Group Narrative
TNM Clinical Stage Group
TNM Clinical Stage Descriptor
TNM Edition
TNM Clinical Staged By
TNM Clinical T
TNM Clinical N
TNM Clinical M
Active Problems Section
Comorbidities
Progress Note Section
Progress Notes Narrative
Coded Results Section

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Data Element
Procedure
Procedure Date
Coded Result
Result Text
Result Date
Diagnosing Laboratory
Procedures Section
Procedure (e.g., Surgery of primary site)
Date of Surgery
Medications Section
Medications Chemotherapy, Hormone Therapy, Immunotherapy
Start Date
Stop Date
Frequency
Route
Dose
Site
Rate
Product
Strength
Code
Instructions
Medications Administered Section (medications that are administered during the encounter) Chemotherapy, Hormone Therapy, Immunotherapy
Medications
Start Date
Stop Date
Frequency
Route
Dose
Site
Rate
Product
Strength
Code
Instructions
Care Plan Section

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Data Element
Observation Requests
Medication
Procedure
Patient Referred To (Encounter)

375

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PRPH-Ca Glossary

Add the following terms to the Glossary:

AJCC – American Joint Commission on Cancer – Author of the TNM staging system (See TNM
380 Stage)

Cancer case – A summary of all submitted information. It contains the final best information regarding a patient and his or her cancer and includes patient demographic, medical, staging, treatment, and service information.

Cancer Control – Actions taken to reduce the frequency and impact of cancer, both financially
385 and medically.

Cancer reporting – Actions taken to notify a public health agency of a case of cancer.

Cancer reporting extract – A CDA document containing required and recommended information about a patient's cancer diagnosis and treatment, submitted by a physician to a public health cancer registry.

390 **Certified Tumor Registrar** – A nationally certified data collection and management expert with the training and specialized skills to provide the high quality data required in all avenues of cancer statistics and research.

Chemotherapy regimen – A collection of drugs administered in a highly organized manner for treating cancer. It includes information on doses, scheduling, and duration of administration.

395 **Co-morbidity** – The presence of one or more disorders (or diseases) in addition to cancer.

Cytology – Microscopic examination of cells.

Endoscopy – A medical test to examine the interior of a hollow organ or cavity of the body

First course of treatment – Includes all methods of treatment recorded in the treatment plan and administered to the patient before disease progression or recurrence.

400 **Histopathology** – Microscopic examination of tissues.

Hospital Cancer Registry – Collects information on all cancer patients who use the services of a hospital. It may be required to report cancer cases to the central registry, to respond to inquiries from the central registry, or to allow central registry access to its records.

Immunotherapy – Treatment that stimulates the body's immune system to fight tumors; also
405 called biological response modifier (BRM) therapy.

Melanoma - A tumor of melanin-forming cells, typically a malignant tumor associated with skin cancer.

Metastasis – The spread of cancer to other parts of the body.

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NAACCR – North American Association of Central Cancer Registries. A collaborative umbrella organization for cancer registries, governmental agencies, professional organizations, and private groups in North America interested in enhancing the quality and use of cancer registry data.

Public Health Cancer Registry (Central Cancer Registry/State cancer Registry) – A registry for a defined geographic location that collects cancer information from more than one facility and consolidates multiple reports into one record

Stage – The extent of involvement of organs and tissues by tumor (e.g. how far the cancer has spread in the body

Systemic therapy – Treatment that affects the entire body, rather than a localized area. Types of systemic therapy include chemotherapy, hormone therapy, and biological therapy. Systemic therapy enters the bloodstream to destroy or control cancer throughout the body.

TNM Stage – Tumor/Nodes/Metastasis – A system to classify the extent of disease based mostly on anatomic information on the extent of the primary tumor, regional lymph nodes and distant metastasis.

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Volume 2 – Transactions and Content Modules

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5.0 Namespaces and Vocabularies

The following vocabularies are referenced in this document. An extensive list of registered vocabularies can be found at http://hl7.amg-hq.net/oid/. Realm-specific vocabularies are included in the related appendix.

440

codeSystem	codeSystemName	Description
2.16.840.1.113883.5	HL7	This is the root OID for HL7 v3 code systems
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 the CDA Release 2.0 Content Modules.
1.3.6.1.4.1.19376.1.7.3	IHE QRPH Template Identifiers	This is the root OID for all IHE QRPH Templates.
1.3.6.1.4.1.19376.1.5.3.4	IHE Extensions to CDA Release 2.0	Namespace OID used for IHE Extensions to CDA Release 2.0
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
2.16.840.1.113883.6.103	ICD-9* CM (diagnosis codes)	International Classification of Diseases (Realm-Specific)
2.16.840.1.113883.6.3	ICD-10* (diagnosis codes)	International Classification of Diseases (Realm Specific)
2.16.840.1.113883.6.43.1	ICD-O-3	International Classification of Diseases for Oncology, Version 3
	ILO	International Labor Office International Standard Classification of Occupations 2008 (ISCO-08)

5.1 IHE Format Codes

The table below lists the format codes, template identifiers and media types used by this profile.

Profile	Format Code	Media Type	Template ID
Physician Reporting to Public Health – Cancer Registry	urn:ihe:qrph:prph:2009	text/xml	1.3.6.1.4.1.19376.1.7.3.1.1.14.1

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6.0 QRPH Content Modules

445 ## 6.3 HL7 Version 3.0 Content Modules

This section contains modules that describe the content requirements of the Cancer Reporting profile.

6.3.1 CDA Document Content Modules

6.3.1.A Physician Report to Cancer Registry 1.3.6.1.4.1.19376.1.7.3.1.1.14

450 The Physician Cancer Report contains a record of a patient's encounter for diagnosis and/or treatment of cancer. This content module inherits from the Medical Documents content module, and so must conform to the requirements of that template as well.

6.3.1.A.1 Parent Template

This document is an instance of the Medical Document template (1.3.6.1.4.1.19376.1.5.3.1.1.1).

455 ##### 6.3.1.A.2 LOINC Code

The LOINC code for this document is **x-physician-cancer-rep**

6.3.1.A.3 Standards

CDAR2	HL7 CDA Release 2.0
LOINC	Logical Observation Identifiers, Names and Codes
NAACCR	North American Association of Central Cancer Registries (US. Realm Constraint)
CDTHP	CDA for Common Document Types History and Physical Notes (DSTU)

6.3.1.A.4 Specification

Note: Refer to the appendices for realm-specific optionality and templateIDs.

460 In an attempt to clarify our documentation and required fields, IHE have adopted a method similar in nature to that of HL7. Tables that define the section requirements at the document level (i.e., document X contains sections a, b, c, …) have the following columns:

- Opt:
  - Conformance: Contains the value R. If the value is R under Conformance, the value must
465 be present but CAN BE NULL using the HL7 definitions of null.
  - Mandatory Inclusion Flag: If this field contains the flag value M, this overrides the can be null constraint in the Conformance column. Any field with the Mandatory Inclusion flag is required and SHALL not be null.

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- Cardinality: Defines the number of instances of a section that may be present.

470
- Template Name: Name of the section template
- Section Template ID: OID that designates the template.
- Volume 2 Location: Where to find specific details on the IHE Technical Frameworks and Supplements.
- Further Constraints: Normally used to indicate Value Sets that are relevant. May provide further constraints on the definition.

475

Not all combinations of the values in the columns Mandatory Inclusion Flag, Conformance and Cardinality are allowed. Table Y shows the valid combinations.

Mandatory Inclusion Flag	Conformance	Cardinality	Comment
M	R	[1..1]	The section SHALL be present. The section cannot be null. There will be one instance of the section.
M	R	[1..*]	The section SHALL be present. The section cannot be null. There will be one or more instances of the section
	R	[1..1]	The section SHALL be present. The section can be null. There will be one instance of the section.
	R	[1..*]	The section SHALL be present. The section can be null. There will be one or more instances of the section. If there is more than one instance of the section, no instances SHALL be null.
		[0..*]	The section is not required to be present.

Template ID		**1.3.6.1.4.1.19376.1.7.3.1.1.14**		
Parent Template		Medical Document 1.3.6.1.4.1.19376.1.5.3.1.1.1 [PCC TF-2]		
General Description		The Physician Cancer Report contains a record of a patient's encounter for diagnosis and/or treatment of cancer. This content module inherits from the Medical Documents content module, and so must conform to the requirements of that template as well.		
Document Code		LOINC = x-cancer-rep (requested from LOINC)		
Opt	**Data Element or Section Name**	**Section Template ID**	**Location**	**Further Constraints**
M [1..1]	Header Section: Provider Referred From	1.3.6.1.4.1.19376.1.7.3.1.1.14	PRPH-Ca Supplement 6.3.2.1	Provider Referred From element SHALL be present. An appropriate distinction of "None" is permitted: ClinicalDocument/componentOf/encompassingEncounter/encounterParticipant

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M [1..1]	Header Section: Birthplace	1.3.6.1.4.1.19376.1.7.3.1.1.14	**PRPH-Ca Supplement 6.3.2.2**	Birthplace element SHALL be present. An appropriate distinction of “None” is permitted: ClinicalDocument/recordTarget/patientRole/patient/birthplace
R [1..1]	Coded Social History Section	1.3.6.1.4.1.19376.1.5.3.1.3.16.1	PRPH-Ca Supplement 6.3.1.A.3.2.3 **PCC Content Module Supplement 6.3.3.2.36**	Social History Observations for Occupation, Industry, and History of Tobacco Use SHALL be present [3..*]. An appropriate distinction of “None” is permitted. Occupation: ClinicalDocument/component/structuredBody/component/section[templateId[@root=’1.3.6.1.4.1.19376.1.5.3.1.3.16.1’]]/entry/observation[templateId[@root="1.3.6.1.4.1.19376.1.5.3.1.4.13.4"]]/code[@code=’21843-8’]] Industry: ClinicalDocument/component/structuredBody/component/section[templateId[@root=’1.3.6.1.4.1.19376.1.5.3.1.3.16.1’]]/entry/observation[templateId[@root="1.3.6.1.4.1.19376.1.5.3.1.4.13.4"]]/code[@code=’21844-6’]] Tobacco Use: ClinicalDocument/component/structuredBody/component/section[templateId[@root=’1.3.6.1.4.1.19376.1.5.3.1.3.16.1’]]/entry/observation[templateId[@root="1.3.6.1.4.1.19376.1.5.3.1.4.13.4"]]/code[@code=’11366-2’]]
R [1..1]	Payers Section	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7	**PCC TF-2 6.3.3.7.1**	
M [1..1]	Cancer Diagnosis Section This section documents the physician’s diagnosis of the malignancy after review of all relevant diagnostic examinations and studies. Includes information about the date of diagnosis, the location of the cancer, its histologic type and the stage of the cancer.	1.3.6.1.4.1.19376.1.7.3.1.3.14.1	PRPH-Ca Supplement **6.3.3.2.X**	

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R [1..1]	Active Problems Section	1.3.6.1.4.1.19376.1.5.3.1.3.6	PCC TF-2 6.3.3.2.3	
R [1..1]	Progress Note Section	1.3.6.1.4.1.19376.1.5.3.1.1.13.2.7	PCC Content Module Supplement 6.3.3.9.4	
R [1..1]	Coded Results Section	1.3.6.1.4.1.19376.1.5.3.1.3.28	**PRPH-Ca Supplement** 6.3.1.A.3.2.3 **PCC TF-2** **6.3.3.5.2**	The Coded Results Section SHALL contain at least one entry for a simple observation for the test result. An appropriate distinction of "None" is permitted. ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.28']]/entry/observation[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.4.13']]
R [1..1]	Procedures Section	2.16.840.1.113883.10.20.1.12	**CCD 3.1.4 Procedures** **Template ID: 2.16.840.1.113883.10.20.1.12**	
R [1..1]	Medications Section Includes chemotherapy, hormone therapy, immunotherapy (biological response modifiers) and endocrine therapy.	1.3.6.1.4.1.19376.1.5.3.1.3.19	**PCC TF-2** **6.3.3.3.1**	
R [1..1]	Medications Administered Section Includes chemotherapy, hormone therapy, immunotherapy (biological response modifiers) and endocrine therapy.	1.3.6.1.4.1.19376.1.5.3.1.3.21	**PCC TF-2** **6.3.3.3.3**	

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R [1..1]	Care Plan Includes narrative or coded description of planned referral status, including hospitalization status, name of hospital, name of Radiation Therapy Facility, and name of specialist.	1.3.6.1.4.1.1937 6.1.5.3.1.3.31	PRPH-Ca Supplement 6.3.1.A.3.2.4 **PCC TF-2** 6.3.3.6.1	The Care Plan Section SHALL contain at least one entry for an encounter for the patient's planned healthcare encounter(s). An appropriate distinction of "None" is permitted. ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.31']]//entry/encounter

480

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6.3.1.A.5 Conformance

```
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" moodCode="EVN"
xmlns="urn:hl7-org:v3">
  <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3"/>
<!-- OIDS for Medical Document, H&P and PRPH-Ca -->
  <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.1'/>
  <templateId root='2.16.840.1.113883.10.20.3'/>
 <templateId root='1.3.6.1.4.1.19376.1.7.3.1.1.14'/>
  <id root=' ' extension=' '/>
  <code code=' ' displayName=' '
    codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>
  <title> Physician Report to Cancer Registry </title>
  <effectiveTime value='20100506012005'/>
  <confidentialityCode code='N' displayName='Normal'
    codeSystem='2.16.840.1.113883.5.25' codeSystemName='Confidentiality' />
  <languageCode code='en-US'/>


  <!-- one or more patient -->
  <recordTarget><patientRole> .. </patientRole></recordTarget>

  <!-- one or more author -->
  <author> .. </author>

  <!-- one or more person who provided information as input to this document -->
  <informant> .. </informant>

  <!-- the organization issuing this report and in charge with its lifecycle -->
  <custodian> .. </custodian>

  <!-- zero or more intended recipient other -->
  <informationRecipient> .. </informationRecipient>

  <!-- the person legally responsible for this report, who may have signed it -->
  <legalAuthenticator> .. </legalAuthenticator>

  <!-- one or more physicians who validated the content and contributed to the conclusion -->
  <authenticator> .. </authenticator>


  <!-- Health care provider who referred the patient to this provider for care -->
  <componentOf><encompassingEncounter><encounterParticipant>..</encounterParticipant></encompassi
  ngEncounter></componentOf>


<component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.16.1'/>
        <!-- Required Coded Social History -->
      </section>
    </component>

    <component>
      <section>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7'/>
        <!-- Required Payers -->
      </section>
    </component>
```


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```
    <component>
      <section>
        <templateId root=’1.3.6.1.4.1.19376.1.7.3.1.3.14.1’/>
         <!-- Mandatory Cancer Diagnosis -->
      </section>
    </component>


    <component>
      <section>
        <templateId root=’1.3.6.1.4.1.19376.1.5.3.1.3.6’/>
         <!-- Required Active Problems -->
      </section>
    </component>


    <component>
      <section>
        <templateId root=’1.3.6.1.4.1.19376.1.5.3.1.1.13.2.7’/>
         <!-- Required Progress Note -->
      </section>
    </component>


    <component>
      <section>
         <templateId root=’1.3.6.1.4.1.19376.1.5.3.1.3.28’/>
         <!-- Required Coded Results -->
      </section>
    </component>


    <component>
      <section>
        <templateId root='2.16.840.1.113883.10.20.1.12’/>
         <!-- Required Procedures -->
      </section>
    </component>


    <component>
      <section>
         <templateId root=’1.3.6.1.4.1.19376.1.5.3.1.3.19’/>
         <!-- Required Medications -->
      </section>
    </component>

    <component>
      <section>
         <templateId root=’1.3.6.1.4.1.19376.1.5.3.1.3.21’/>
         <!-- Required Medications Administered -->
      </section>
    </component>


    <component>
      <section>
        <templateId root=’1.3.6.1.4.1.19376.1.5.3.1.3.31’/>
         <!-- Required Care Plan -->
      </section>
    </component>
```


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605

```
  </structuredBody>
 </component>
</ClinicalDocument>
```

Figure 6.3.1.2.4-1. Conformance Example

6.3.1.A.6 Document Constraints

This section describes the specific constraints applied to the PRPH-Ca document.

610

6.3.1.A.6.1 Coded Social History Section Further Conformance Constraints

6.3.1.A.6.1.1 Occupation History

The Coded Social History Section SHALL contain at least one entry for social history observation for the patient’s usual occupation. An appropriate distinction of “None” is permitted.

6.3.1.A.6.1.1.1 Specification

615

```
<observation classCode="OBS" moodCode="EVN">
< !-- templateId for PCC simple observation, CCD social history observation, PCC
  social history observation -->
<templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.13"/>
<templateId root="2.16.840.1.113883.10.20.1.33"/>
<templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.13.4"/>
    <code  codeSystem="2.16.840.1.113883.6.1"
           codeSystemName="LOINC"
           code="21843-8"
           displayName="Usual Occupation Hx"/>
    <statusCode code="completed"/>
    <value xsi:type="CD"
           codeSystem="2.16.840.1.113883.6.243"
           codeSystemName="US BLS Standard Occupation Codes (SOC)"
           code="35-2012"
           displayName="Cook, Restaurant">
      <originalText>cook</originalText>
    </value>

  </observation>
```

620 625 630 635

6.3.1.A.6.1.1.1.1 <code code='21843-8' displayName=”Usual Occupation Hx” codeSystem='2.16.840.1.113883.6.1' codeSystemName=’LOINC”/>

The <code> element indicates that this is an occupation. This code SHALL be the LOINC code 21843-8. It is good style to include the displayName and codeSystemName to help debugging.

640

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6.3.1.A.6.1.1.1.2 <value xsi:type='CD' value=' '>

The <value> element SHALL be present if available, and records the occupation of the patient. It should be represented as a coded value.

Refer to the Realm-Specific content of this Profile for recommended Code Systems and Value
645 Sets (See Volume 4).

6.3.1.A.6.1.1.1.3

The <interpretationCode>, <methodCode>, and <targetSiteCode> should not be present in an occupation entry.

6.3.1.A.6.1.2 Industry History

650 The Social History Section SHALL contain at least one entry for social history observation for the patient's usual industry. An appropriate distinction of "None" is permitted.

6.3.1.A.6.1.2.1 Specification

```
<observation classCode="OBS" moodCode="EVN">
< !-- templateId for PCC simple observation, CCD social history observation, PCC
  social history observation -->
<templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.13"/>
<templateId root="2.16.840.1.113883.10.20.1.33"/>
<templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.13.4"/>
    <code  codeSystem="2.16.840.1.113883.6.1"
           codeSystemName="LOINC"
           code="21844-6"
           displayName="Usual Industry Hx"/>
    <statusCode code="completed"/>
    <value xsi:type="CD"
           codeSystem="2.16.840.1.113883.6.85"
           codeSystemName="US Census NAICS"
           code="xxx"
           displayName="yyy">
      <originalText>Oil and Gas</originalText>
    </value>
  </observation>
```

655
660
665
670

6.3.1.A.6.1.2.1.1 <code code='21844-6' displayName="Usual Industry Hx" codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC"/>

The <code> element indicates that this is an industry. This code SHALL be the LOINC code
675 28144-6. It is good style to include the displayName and codeSystemName to help debugging.

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6.3.1.A.6.1.2.1.2 <value xsi:type='CD' value=' '>

The <value> element SHALL be present if available, and records the industry of the employment of the patient. It should be represented as a coded value.

680 Refer to the Realm-Specific content of this Profile for recommended Code Systems and Value Sets (See Volume 4).

The <interpretationCode>, <methodCode>, and <targetSiteCode> should not be present in an industry entry.

6.3.1.A.6.1.3 History of Tobacco Use

685 The Social History Section SHALL contain at least one entry for social history observation for the patient's history of tobacco use. An appropriate distinction of "None" is permitted.

6.3.1.A.6.1.3.1 Specification

```
<observation classCode="OBS" moodCode="EVN">
< !-- templateId for PCC simple observation, CCD social history observation, PCC
  social history observation -->
<templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.13"/>
<templateId root="2.16.840.1.113883.10.20.1.33"/>
<templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.13.4"/>
    <code  codeSystem="2.16.840.1.113883.6.1"
           codeSystemName="LOINC"
           code="11366-2"
           displayName="History of Tobacco Use"/>
    <statusCode code="completed"/>
    <value xsi:type="CD"
           codeSystem="2.16.840.1.113883.3.520.3.16"
           codeSystemName="History of Tobacco Use"
           code="4"
           displayName="Never Smoked">
      <originalText>Patient has never smoked</originalText>
    </value>
  </observation>
```

6.3.1.A.3.2.3.3.2 <code code='11366-2' displayName="History of Tobacco Use" codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC"/>

710 The <code> element indicates that this is an industry. This code SHALL be the LOINC code 11366-2. It is good style to include the displayName and codeSystemName to help debugging.

6.3.1.A.3.2.3.3.3 <value xsi:type='CD' value=' '>

The <value> element SHALL be present if available, and records the patient's history of tobacco
715 use. It should be represented as a coded value.
Refer to the Realm-Specific content of this Profile for recommended Code Systems and Value Sets (See Volume 4).

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The <interpretationCode>, <methodCode>, and <targetSiteCode> should not be present in an industry entry.

720

6.3.1.A.3.2.4 Coded Results Section Conformance Constraints

The Coded Results Section SHALL contain at least one entry for a simple observation for the test result. An appropriate distinction of "None" is permitted.

6.3.1.A.3.2.5 Care Plan Section Conformance Constraints

The Care Plan Section SHALL contain at least one entry for an encounter for the patient's planned healthcare encounter(s). An appropriate distinction of "None" is permitted.

725

6.3.2 CDA Header Content Modules

6.3.2.1 Provider Referred From:

This observation records the provider that referred the patient to the reporting facility.

This element SHALL be included as an encounterParticipant in the header of the CDA document in the event the patient was referred to this healthcare provider. An appropriate distinction of "None" is permitted. The typeCode SHALL be "REF".

730

Example

735 740 745 750 755

```
<componentOf>
  <encompassingEncounter xmlns:ihecard='urn:ihe:card'>
    <templateId root='1.3.6.1.4.1.19376.1.4.1.3.1'/>
    <effectiveTime value="20110407"/>
    <responsibleParty>
   …
    </responsibleParty>
    <encounterParticipant typeCode="REF">
      <assignedEntity>
        <id root="2.16.840.1.113883.4.6" extension=" " />
        <code code=" " codeSystem="2.16.840.1.113883.6.101"
         codeSystemName="nuccProviderCodes" displayName=" ">
        <addr>referring physician address</addr>
        <telecom>referring physician phone</telecom >
        <assignedPerson>
          <name>referring physician name</name>
        </assignedPerson>
      </assignedEntity>
    </encounterParticipant>
    <location>
   …
    </location>
    …
  </encompassingEncounter >
</componentOf>
```

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6.3.2.2 Birthplace

760 This observation records the birthplace of the patient.

This element SHALL be included in the patient section of the header of the CDA document. An appropriate distinction of “None” is permitted.

Example

```
<recordTarget>
  <patientRole>
  …
   <patient>
      …
      <birthplace>
          <place>
             <addr>
             <city></city>
             <state> </state>
             <country> </country>
             </addr>
          </place>
      /birthplace>
   </patient>
  </patientRole>
</recordTarget>
```


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6.3.3 CDA Section Content Modules

785 See either the PCC Technical Framework Volume 2 or the PCC CDA Content Modules Supplement for Section Content Module definitions.

6.3.4 CDA Entry Content Modules

See either the PCC Technical Framework Volume 2 or the PCC CDA Content Modules Supplement for Entry Content Module definitions.

790 6.5 QRPH Value Sets

See either the PCC Technical Framework Volume 2 or the PCC CDA Content Modules Supplement for Value Sets.

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Volume 4 - National Extensions

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Add the following sections to Volume 4

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1 National Extensions for IHE United States

1.1 Name Space and Vocabularies for the United States

codeSystem	codeSystemName	Description
2.16.840.1.113883.3.520	NAACCR	This is the root OID for North American Association of Central Cancer Registries
2.16.840.1.113883.3.221	PHDSC	This is the root OID for Public Health Data Standards Consortium
2.16.840.1.113883.6.103	ICD-9CM (diagnosis codes)	International Classification of Diseases, Clinical Modification.
2.16.840.1.113883.4.6	NPI	National Provider Identifier (US)
2.16.840.1.113883.4.1	SSA	Social Security Administration (US)
2.16.840.1.113883.6.243	SOC	Standard Occupational Classification (US)
2.16.840.1.113883.6.240	US_COC	United States Census Occupation Codes (US)
2.16.840.1.113883.6.85	NAICS	North American Industry Coding System (US)
2.16.840.1.113883.6.101	NUCC	National Uniform Claim Committee for Provider Types
2.16.840.1.113883.6.12	C4	Current Procedure Terminology 4 (CPT-4) codes
2.16.840.1.113883.6.88	RxNorm	RxNorm

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1.2 Template Constraints for the United States

(CDC National Program of Cancer Registries Advancing e-Cancer Reporting and Registry Operations (NPCR-AERRO) Use Case: Clinician/Physician Office Prepare and Transmit Event Report.)

Each content module has a list of data elements that are Mandatory (M) – cannot create a document without the data element,
830 Required if known (R). The presentation of this information varies with the type of content module, and is described in more detail below. Additional data elements may be provided by the sender that are not defined by a specific content module, but the receiver is not required to interpret them.

1.2.1 Constraints for the United States for Physician Reporting to Public Health – Cancer Registry

The following table provides the US constrained specification for the Physician Reporting to Public Health – Cancer Registry
835 document.

Table 1.2.1-1. Constraints for the United States for Physician Reporting to Public Health – Cancer Registry

DATA ELEMENTS CROSS REFERENCE	
Column	**Definition**
NAACCR ID Number (1)	Data Item number reference assigned to data elementsby the North American Association of Central Cancer Registries (www.naaccr.org) and used by hospital, state, provincial and national cancer registries in North America
Data Element (2)	This is the concept that may be present or a formal data element name corresponding to a standard representation of this concept (Specify). This may be repeated columns that provide additional levels of granularity
templateID (3)	OID for the templateID
Source XPATH Mapping (4)	XPATH of the data element for the Source Document
Mapping Constraints (5)	This column specifies any vocabulary constraints (expressed as value sets), or derivation rules
Optionality (6)	Indicates optionality of the attribute: (M=Mandatory, R=Required (Required if known, may specify whether a flavor of null is to be used)

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
2110	Date Case Report Exported	2.16.840.1.113883.10.20.3	ClinicalDocument/effectiveTime/@value		M
2240, 2250, 2230	Patient Name (First, Middle, Last)	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/patient/name		M
2530, 1810, 1820, 1830	Patient Street Address (City, State, Zip Code, Country)	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/addr		R
	Address History	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/addr/useablePeriod		R
	Patient Telephone	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/telecom/@value		R
220	Patient Sex/Gender (Code, Code System, Code System Name, Display Name)	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/patient/administrativeGenderCode	H&P DSTU OID for Administrative Gender 2.16.840.1.113883.5.1 PHINVADS link for HL7 V3 Administrative Gender 2.16.840.1.113883.1.11.1	R
240	Patient Date of Birth	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/patient/birthTime/@value		R
2300	Patient Medical Record Number	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/id/@extension		M
2320	Patient Social Security Number	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/id[@root='2.16.840.1.113883.4.1']/@extension		R

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
160	Patient Race (Code, Code System, Code System Name, Display Name)	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/patient/raceCode	H&P DSTU OID for Race 2.16.840.1.113883.5.104 PHINVADS link for HL7 V3 Race 2.16.840.1.113883.1.11.14914	R
190	Patient Ethnicity (Code, Code System, Code System Name, Display Name)	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/patient/ethnicGroupCode	H&P DSTU OID for Ethnicity 2.16.840.1.113883.5.50 PHINVADS link for HL7 V3Ethnicity 2.16.840.1.114222.4.11.837	R
250	Patient Birth Place (City, State, Country)	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/patient/birthplace/place/addr		R
1502	Patient Marital Status (Code, Code System, Code System Name, Display Name)	2.16.840.1.113883.10.20.3	ClinicalDocument/recordTarget/patientRole/patient/maritalStatusCode	H&P DSTU OID for Marital Status 2.16.840.1.113883.5.2 PHINVADS link for HL7 V3 Marital Status 2.16.840.1.113883.1.11.12212	R
	Physician Name	2.16.840.1.113883.10.20.3	ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/assignedPerson/name		M

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
	Physician Address	2.16.840.1.113883.10.20.3	ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/address		M
	Provider Organization (Name and ID)	2.16.840.1.113883.10.20.3	ClinicalDocument/documentationOf/serviceEvent/performer/assignedEntity/representedOrganization		M
	Provider Referred From	2.16.840.1.113883.10.20.3	ClinicalDocument/componentOf/encompassingEncounter/encounterParticipant/assignedEntity/assignedPerson/name		R
	Coded Social History Section	1.3.6.1.4.1.19376.1.5.3.1.3.16.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.16.1']]		R
	Social History Narrative	1.3.6.1.4.1.19376.1.5.3.1.3.16.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.16.1']]/text/list/item		R
270	Occupation (Code, Code System, Code System Name, Display Name, Original Text)	1.3.6.1.4.1.19376.1.5.3.1.3.16.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.16.1']]/entry/observation[templateId[@root="1.3.6.1.4.1.19376.1.5.3.1.4.13.4"]]/code[@code='21843-8']]	2.16.840.1.113883.6.243 2.16.840.1.114222.4.11.887 PHIN VADS Link for occupation (SOC) DYNAMIC	R
280	Industry (Code, Code System, Code System Name, Display Name, Original Text)	1.3.6.1.4.1.19376.1.5.3.1.3.16.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.16.1']]/entry/observation[templateId[@root="1.3.6.1.4.1.19376.1.5.3.1.4.13.4"]]/code[@code='21844-6']]	2.16.840.1.113883.6.85 2.16.840.1.114222.4.11.1100 PHIN VADS link for Industry - NAICS 2007 DYNAMIC	R

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
	History of Tobacco Use (Code, Code System, Code System Name, Display Name, Original Text)	1.3.6.1.4.1.19376.1.5.3.1.3.16.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.16.1']]/entry/observation[templateId[@root="1.3.6.1.4.1.19376.1.5.3.1.4.13.4"]]/code[@code='11366-2']]	2.16.840.1.113883.3.520.3.16	R
	Payers Section	1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7']]	--	R
630	Primary Payer at Diagnosis (Code, Code System, Code System Name, Display Name) (Coverage Entry)	1.3.6.1.4.1.19376.1.5.3.1.4.17	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.4.17']]/entry/act/entryRelationship/act/code	X12 Data Element 1336 (2.16.840.1.113883.6.255.1336) OR Source of Payer Typology (2.16.840.1.113883.221.5)	R
	Cancer Diagnosis Section	1.3.6.1.4.1.19376.1.7.3.1.3.14.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]	--	M
	Cancer Diagnosis Entry	1.3.6.1.4.1.19376.1.7.3.1.4.14.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]	--	R
390	Diagnosis Date	1.3.6.1.4.1.19376.1.7.3.1.4.14.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/effectiveTime/low/@value	--	R

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
522	Histology (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/value	2.16.840.1.113883.6.43.1	R
523	Behavior (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/value/qualifier[name[@code="31206-6"]]/value	2.16.840.1.113883.3.520.4.14 PHINVADS link to Behavior	R
490	Best Method of Confirmation (Diagnostic confirmation)	1.3.6.1.4.1.19376.1.7.3.1.4.14.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/value/qualifier[name[@code="21861-0"]]/value	2.16.840.1.113883.3.520.4.3 PHINVADS link to Best Method of Confirmation	R
400	Primary Site (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/targetSiteCode	2.16.840.1.113883.6.43.1	R
410	Laterality (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/targetSiteCode/qualifier/value	2.16.840.1.113883.3.520.4.1 PHINVADS link to Laterality	R
	Stage Group Narrative	1.3.6.1.4.1.19376.1.7.3.1.4.14.2	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/entryRelationship/observation/text		

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
970	TNM Clinical Stage Group (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.2	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/entryRelationship/observation/value	2.16.840.1.113883.15.6	R
980	TNM Clinical Stage Descriptor (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.2	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/entryRelationship/observation/value/qualifier[name[@code="21909-7"]]/value	PHINVADS link for TNM Stage Descriptor	R
1060	TNM Edition (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.2	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/entryRelationship/observation/value/qualifier[name[@code="21917-0"]]/value	2.16.840.1.113883.3.520.4.5 PHINVADS link for TNM Edition	R
990	TNM Clinical Staged By (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.2	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.4.14.1']]/entryRelationship/observation/participant/participantRole/playingEntity/code	2.16.840.1.113883.3.520.4.4 PHINVADS link to TNM Staged By	R
940	TNM Clinical T (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.2	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation/entryRelationship/observation/entryRelationship/observation[code[@code='21905-5'/value	2.16.840.1.113883.15.6	R

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
950	TNM Clinical N (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.2	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation/entryRelationship/observation/entryRelationship/observation[code[@code='21906-3'/value	2.16.840.1.113883.15.6	R
960	TNM Clinical M (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1.4.14.2	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.7.3.1.3.14.1']]/entry/act/entryRelationship/observation/entryRelationship/observation/entryRelationship/observation[code[@code='21907-1'/value	2.16.840.1.113883.15.6	R
	Active Problems Section	1.3.6.1.4.1.19376.1.5.3.1.3.6	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.6']]	--	R
3110 - 3164	Comorbidities (Code, Code System, Code System Name, Display Name) (Problem Concern Entry)	1.3.6.1.4.1.19376.1.5.3.1.4.5.2	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.6']]/entry/act/entryRelationship/observation/value	2.16.840.1.113883.6.103 PHINVADS link for Comorbidities	R
	Progress Note Section	1.3.6.1.4.1.19376.1.5.3.1.1.13.2.7	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.7']]	--	R
	Progress Notes Narrative		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.1.13.2.7']]/text		
	Coded Results Section	1.3.6.1.4.1.19376.1.5.3.1.3.28	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.28']]		R

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
	Procedure (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.5.3.1.4.19	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.28']]/entry/procedure/code	2.16.840.1.113883.6.12	R
	Procedure Date	1.3.6.1.4.1.19376.1.5.3.1.4.19	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.28']]/entry/procedure/effectiveTime		
	Coded Result (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.5.3.1.4.13	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.28']]/entry/observation/code		
	Result Text	1.3.6.1.4.1.19376.1.5.3.1.4.13	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.28']]/entry/observation/text		
	Result Date	1.3.6.1.4.1.19376.1.5.3.1.4.13	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.28']]/entry/observation/effectiveTime		
	Diagnosing Laboratory	1.3.6.1.4.1.19376.1.5.3.1.4.13	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.28']]/entry/observation/author/assignedAuthor/representedOrganization		
	Procedures Section	2.16.840.1.113883.10.20.1.12	ClinicalDocument/component/structuredBody/component/section[templateId[@root='2.16.840.1.113883.10.20.1.12']]		R
670	Procedure (e.g., Surgery of primary site)	2.16.840.1.113883.10.20.1.29	ClinicalDocument/component/structuredBody/component/section[templateId[@root='2.16.840.1.113883.10.20.1.12']]/entry/procedure/code	2.16.840.1.113883.6.12	R

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
	Site of procedure (Code, Code System, Code System Name, Display Name)	2.16.840.1.113883.10.20.1.29	ClinicalDocument/component/structuredBody/component/section[templateId[@root='2.16.840.1.113883.10.20.1.12']]/entry/procedure/targetSiteCode		
1200	Date of Surgery	2.16.840.1.113883.10.20.1.29	ClinicalDocument/component/structuredBody/component/section[templateId[@root='2.16.840.1.113883.10.20.1.12']]/entry/procedure/effectiveTime		
	Medications Section	1.3.6.1.4.1.19376.1.5.3.1.3.19	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]		R
	Medications Chemotherapy, Hormone Therapy, Immunotherapy	1.3.6.1.4.1.19376.1.5.3.1.4.7	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]entry/substanceAdministration	2.16.840.1.113883.6.88	R
1220	Start Date		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]/entry/substanceAdministration/effectiveTime[1]/low		R
	Stop Date		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]/entry/substanceAdministration/effectiveTime[1]/high		R
	Frequency		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]/entry/substanceAdministration/effectiveTime[2]		R
	Route (Code, Code System, Code System Name, Display Name)		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]/entry/substanceAdministration/routeCode		R

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
	Dose		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]/entry/substanceAdministration/doseQuantity		R
	Site		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]/entry/substanceAdministration/approachSiteCode		R
	Rate		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]/entry/substanceAdministration/rateQuantity		R
	Product		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/name		R
	Strength		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/code/originalText		R
	Code (Code, Code System, Code System Name, Display Name)		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.19']]/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/code		R

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
	Medications Administered Section (medications that are administered during the encounter) Chemotherapy, Hormone Therapy, Immunotherapy	1.3.6.1.4.1.19376.1.5.3.1.3.21	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21']]		R
	Medications Chemotherapy, Hormone Therapy, Immunotherapy	1.3.6.1.4.1.19376.1.5.3.1.4.7	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21']]entry/substanceAdministration	2.16.840.1.113883.6.88	R
1220	Start Date		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21']]/entry/substanceAdministration/effectiveTime[1]/low		R
	Stop Date		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21']]/entry/substanceAdministration/effectiveTime[1]/high		R
	Frequency		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21']]/entry/substanceAdministration/effectiveTime[2]		R
	Route		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21']]/entry/substanceAdministration/routeCode		R
	Dose		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21']]/entry/substanceAdministration/doseQuantity		R

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
	Site		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21’]]/entry/substanceAdministration/approachSiteCode		R
	Rate		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21’]]/entry/substanceAdministration/rateQuantity		R
	Product		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21’]]/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/name		R
	Strength		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21’]]/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/code/originalText		R
	Code		ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.21’]]/entry/substanceAdministration/consumable/manufacturedProduct/manufacturedMaterial/code		R
	Care Plan Section	1.3.6.1.4.1.19376.1.5.3.1.3.31	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.31']]		R
	Observation Requests	1.19376.1.5.3.1.1.20.3.1	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.31']]/entry[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.1.20.3.1']]		R
	Medication	1.3.6.1.4.1.19376.1.5.3.1.4.7	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.31']]/entry[templateId[@root=’1.3.6.1.4.1.19376.1.5.3.1.4.7']]	2.16.840.1.113883.6.88	R

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NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt
	Procedure	1.3.6.1.4.1.19376.1.5.3.1.4.19	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.4.19']]/entry[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.1.20.3.1']]	2.16.840.1.113883.6.12	R
2420	Patient Referred To (Encounter)	1.3.6.1.4.1.19376.1.5.3.1.4.14	ClinicalDocument/component/structuredBody/component/section[templateId[@root='1.3.6.1.4.1.19376.1.5.3.1.3.31']]/entry/encounter/performer/assignedEntity/assignedPerson		R

1.2.2 Form Filler and Form Manager Pre-population Instructions

When using the RFD approach, the Form Filler shall provide the pre-population data using all content defined in the US Realm constrained specification of the Physician Reporting to Public Health Repository – Cancer Registry document (see Table 1.2.1-1). The Form Manager shall use the data element mapping defined in the US Realm constrained specification of the Physician Reporting to Public Health Repository – Cancer Registry document (see Table 1.2.1-1) and shall further apply the following additional constraint:

Table 1.2.2-1. Additional RFD Form Manager Constraint for the United States for Physician Reporting to Public Health – Cancer Registry

DATA ELEMENTS CROSS REFERENCE	
Column	**Definition**
NAACCR ID Number (1)	Data Item number reference assigned to data elementsby the North American Association of Central Cancer Registries (www.naaccr.org) and used by hospital, state, provincial and national cancer registries in North America
Data Element (2)	This is the concept that may be present or a formal data element name corresponding to a standard representation of this concept (Specify). This may be repeated columns that provide additional levels of granularity
templateID (3)	OID for the templateID
Source XPATH Mapping (4)	XPATH of the data element for the Source Document
Mapping Constraints (5)	This column specifies any vocabulary constraints (expressed as value sets), or derivation rules

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Optionality (6)	Indicates optionality of the attribute: (M=Mandatory, R=Required (Required if known, may specify whether a flavor of null is to be used)

850

NAACCR ID	Data Element	templateID	Source XPATH Mapping	Mapping Constraints (Code Systems and/or Value Sets)	Opt for Prepop
22	Histology (Code, Code System, Code System Name, Display Name)	1.3.6.1.4.1.19376.1.7.3.1 .4.14.1	If null, Requires Data Entry	Form Manager SHALL provide selection from text values: "(Adeno)Carcinoma" "(Adeno)Carcinoma In Situ" "Melanoma" "Melanoma In Situ" "Sarcoma" "Lymphoma" "Leukemia" "Other" Form Manager SHALL report coded values: "(Adeno)Carcinoma"= 8010/3 "(Adeno)Carcinoma In Situ" = 8010/2 "Melanoma" = 8720/3 "Melanoma In Situ" = 8720/2 "Sarcoma" = 8800/3 "Lymphoma" = 9590/3 "Leukemia" = 9800/3 "Other" = 9990/3	If Histology Code is Null, Form Manager SHALL provide selection from text values and Form Receiver/Content Creator SHALL report coded value

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1.3 Value Set Constraints for the United States

History of Tobacco Use

LOINC = 11366-2	
Code System: NAACCR History of Tobacco Use 2.16.840.1.113883.3.520.3.16	
Code	Meaning
1	Current every day smoker
2	Current some day smoker
3	Former smoker
4	Never smoker
5	Smoker, current status unknown
6	Unknown if ever smoked

855

Laterality at Diagnosis Value Set

NAACCR Data Item Number: 410	
LOINC 20228-3	
Code System: NAACCR Laterality at Diagnosis 2.16.840.1.113883.3.520.4.1	
PHINVADS link to Laterality	
Code	Meaning
0	Not a paired site
1	Right: origin of primary
2	Left: origin of primary
3	Only one side involved, right or left origin unspecified
4	Bilateral involvement, lateral origin unknown; stated to be single primary; including both ovaries involved simultaneously, single histology; bilateral retinoblastomas; bilateral Wilms' tumors
5	Midline of Tumor
9	Paired site, but no information concerning laterality, midline tumor

NAACCR Behavior Code Value Set

NAACCR Data Item 523	
LOINC = 31206-6	
Code System: NAACCR Behavior Code 2.16.840.1.113883.3.520.4.14	
PHINVADS link to Behavior	
Code	Meaning
0	Benign
1	Uncertain whether benign or malignant

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2	In situ; non-invasive
3	Malignant, primary
6	Malignant, metastatic
9	Malignant, uncertain whether primary or metastatic

TNM Clinical Staged By Value Set

NAACCR Data Item Number: 990	
LOINC = 21910-5	
Code System: NAACCR TNM Clinical Staged By 2.16.840.1.113883.3.520.4.4	
Code	Meaning
1	Managing physician
2	Pathologist
3	Pathologist and managing physician
4	Cancer Committee chair, cancer liaison physician, or registry physician advisor
5	Cancer registrar
6	Cancer registrar and physician
7	Staging assigned at another facility

860

NAACCR Best Method of Confirmation Value Set

NAACCR Data Item Number: 490	
LOINC = 21861-0	
Code System: NAACCR Diagnostic Confirmation 2.16.840.1.113883.3.520.4.3	
PHINVADS link to Best Method of Confirmation	
Code	Meaning
1	Positive histology
2	Positive cytology, no positive histology
4	Positive microscopic confirmation, method not specified
5	Positive laboratory test/marker study
6	Direct visualization without microscopic confirmation
7	Radiography and other imaging techniques without microscopic confirmation
8	Clinical diagnosis only (other than 5, 6, or 7)

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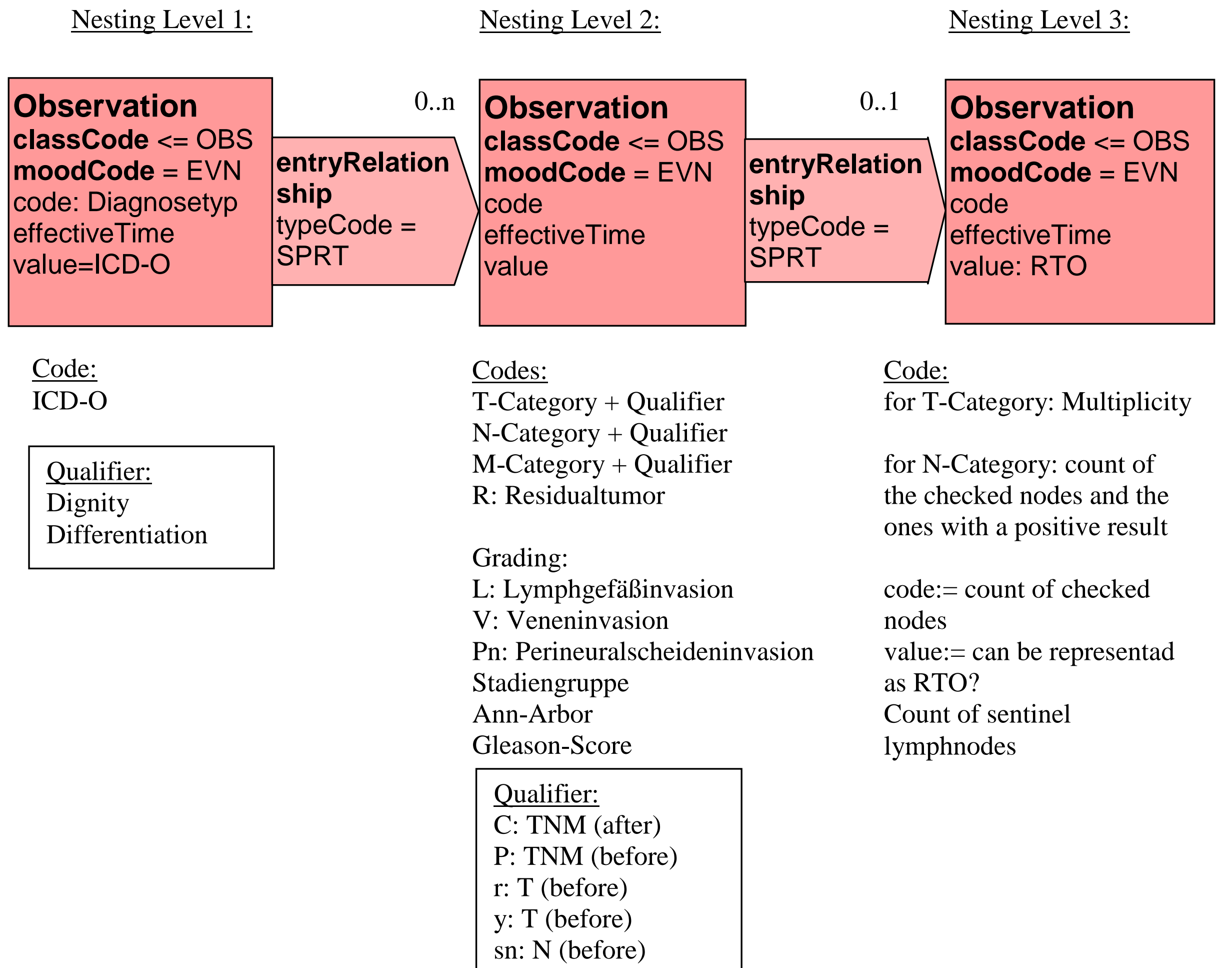
2 National Extensions for IHE Germany

865



Note: the remark «after» or «before» refers to the tumor formula expressing whether it is represented there, after or before the categories.

870 The codes which specify the contents of the observation class or a qualifier are listed in the following table.

Code	Codename	Class / Pfath	Representation (Observation or Qualifier)
DF	Differentiation	Observation (ICD-O)	qualifier.@name
DN	Dignity	Observation (ICD-O)	qualifier.@name
T	T	support-Observation	Observation/value.@code

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Code	Codename	Class / Pfath	Representation (Observation or Qualifier)
M	M	support-Observation	Observation/value.@code
N	N	support-Observation	Observation/value.@code
MP	Multiplicity	support-Observation(T)-support-Observation	Observation/value.@code
CF	Certainty Factor	support-Observation(T, N or M)	qualifier.@name
RS	Residual tumor	support-Observation	Observation/value.@code
GR	Grading	support-Observation	Observation/value.@code
LI	Lymph invasion	support-Observation	Observation/value.@code
VI	Vene invasion	support-Observation	Observation/value.@code
SG	Stading	support-Observation	Observation/value.@code
AA	Ann-Arbor classification	support-Observation	Observation/value.@code

875

CONF-1: A TNM-classification Observation **SHALL** be represented with an `observation` element where the value of `@classCode` is `OBS` and the value of `@moodCode` is `EVN`.

CONF-2: A `value` element **SHOULD** be present where the value of `@xsi:type` is `CD` and the value of `@code` is from 1.2.276.0.76.5.???? ICD-O.

880

CONF-3: A `qualifier` element **SHOULD** be present where the value of `name/@code` is the qualifier from the above mentioned table and the value of `name/@codeSystem` is 2.16.840.1.113883.3.7.1.0.

885

CONF-4: An `effectiveTime` element **MAY** be present representing the date of diagnosis.

CONF-5: An `entryRelationship` element **MAY** be present where the value of `@typeCode` is `SPRT`, containing one of the TNM-classification values.

890

CONF-6: An `entryRelationship/observation` element **MAY** be present where the value of `@classCode` is `OBS` and the value of `@moodCode` is `EVN`.

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895

CONF-7: An entryRelationship/observation/`qualifier` element **SHOULD** be present where the value of `name/@code` is the qualifier from the above mentioned table and the value of `name/@codeSystem` is 2.16.840.1.113883.3.7.1.0.

900

CONF-8: If a T-category value should be transmitted an entryRelationship/observation element **SHALL** be present where the value of `value/@codesystem` is coming from the `QRPH-T-classification value set`.

CONF-9: If an N-category value should be transmitted an entryRelationship/observation element **SHALL** be present where the value of `value/@codesystem` is coming from the `QRPH-N-classification value set`.

905

CONF-10: If an M-category value should be transmitted an entryRelationship/observation element **SHALL** be present where the value of `value/@codesystem` is coming from the `QRPH-M-classification value set`.

910 915 920 925 930 935

```
<observation classCode="OBS" moodCode="EVN">
  ...
  <value xsi:type="CD" code="8070" codeSystem="1.2.276.0.76.5.????"
      displayName="Plattenepithelkarzinom">
      codeSystemName="icd-o-3">
   <qualifier>
      <name code="335" codeSystem="2.16.840.1.113883.3.7.1.0"/>
      <value code="0" codeSystem="1.2.276.0.76.5.335"/>
   </qualifier>
   <qualifier>
      <name code="336" codeSystem="2.16.840.1.113883.3.7.1.0"/>
      <value code="1" codeSystem="1.2.276.0.76.5.336"/>
   </qualifier>
  </value>

  <!–– Tumor Formula -->
  <entryRelationship typeCode="SPRT">
   <observation moodCode="EVN" classCode="OBS">
      <!-- T-Code -->
      <value xsi:type="CD" code="T1"
          codeSystem="1.2.276.0.76.5.337"
          codeSystemName="ausdehnung-tnm"/>
          <qualifier>
             <name code="341"
                 codeSystem="2.16.840.1.113883.3.7.1.0"/>
             <value code="C2"
                 codeSystem="1.2.276.0.76.5.341"/>
          </qualifier>
      </value>
   </observation>
```


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```
  </entryRelationship>

  <entryRelationship typeCode="SPRT">
   <observation moodCode="EVN" classCode="OBS">
      <!-- N-Code -->
      <value xsi:type="CD" code="N2"
          codeSystem="1.2.276.0.76.5.338"
          codeSystemName="nodus-tnm"/>
      </value>
   </observation>
  </entryRelationship>

  <entryRelationship typeCode="SPRT">
   <observation moodCode="EVN" classCode="OBS">
      <!-- M-Code -->
      <value xsi:type="CD" code="M0"
          displayName="Fernmetastasen nicht vorhanden"
          codeSystem="1.2.276.0.76.5.339"
          codeSystemName="metastasen"/>
      </value>
   </observation>
  </entryRelationship>

</observation>
```

2.1 ICD-O-Codes

2.1.1 Behavior

Behavior Value Set

LOINC = ????	
Value Set: ???? Code System: ??? OID 1.2.276.0.76.5.335	
Code	Meaning
0	
1	
2	
3	
6	
9	

2.1.2 Grading

The following table represents the gradings which are allowed at all. The column “entity” specifies the cancer entity where this grading is allowed.

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Differentiation/Grading Value Set

LOINC = ????		
Value Set: ???? Code System: Differenzierungsgrad/Grading – Codes (OID 1.2.276.0.76.5.336)		
Code	**Description**	**Entity**
0	Primary acquired melanosis	Malignant Melanoma of Conjunctiva
1	well differentiated	All except Prostata, Malignant Melanoma of Conjunctiva
	Well differentiated (slight anaplasia) (Gleason 2-4)	Prostata
	Malignant melanoma arising from a naevus	Malignant Melanoma of Conjunctiva
2	moderately differentiated	All except Prostata, Malignant Melanoma of Conjunctiva
	Moderately differentiated (moderate anaplasia) (Gleason 5–6)	Prostata
	Malignant melanoma arising from primary acquired melanosis	Malignant Melanoma of Conjunctiva
3	poorly differentiated	All except Prostata, Penis, Kidney, Renal Pelvis and Ureter, Urinary Bladder, Urethra, Malignant Melanoma of Conjunctiva
	Malignant melanoma arising de novo	Malignant Melanoma of Conjunctiva
3-4	Poorly differentiated/ undifferen-tiated (marked anaplasia) (Gleason 7–10)	Prostata
	Poorly differentiated/ undifferentiated	Penis, Kidney, Renal Pelvis and Ureter, Urinary Bladder, Urethra
4	undifferentiated	All except Prostata, Penis, Kidney, Renal Pelvis and Ureter, Urinary Bladder, Urethra, Malignant Melanoma of Conjunctiva
L		
H		
X	grade of differentiation cannot be assessed	Alle

2.2 Codes for the TNM classification

2.2.1Topography (QRPH-T-classification)

975 All known T-categories (with specification of additions/qualifiers). The meaning varies according to entity:

> **CONF-11:** For the German realm the `QRPH-T-classification value set` **SHALL** be bound to the following table (OID 1.2.276.0.76.5.337).

T-classification Value Set

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LOINC = ????	
Value Set: ???? Code System: Topographie-Codes (Version 6, OID 1.2.276.0.76.5.337)	
Realm: German	
Code	**Meaning**
Ta	
Tis	Carcinoma in situ
T0	No evidence of primary tumor
T1	
T1mic	
T1a	
T1a1	
T1a2	
T1b	
T1b1	
T1b2	
T1c	
T1d	
T2	
T2a	
T2a1	
T2a2	
T2b	
T2c	
T2d	
T3	
T3a	
T3b	
T3c	
T3d	
T4	
T4a	
T4b	
T4c	
T4d	
T4e	
Tx	Primary tumor cannot be assessed

980

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2.2.2 Nodes (QRPH-N-classification)

CONF-12: For the German realm the `QRPH-N-classification value set` **SHALL** be bound to the following table (OID 1.2.276.0.76.5.338).

985 N-classification Value Set

LOINC = ????
Value Set: ???? Code System: (N) Knoten-Codes (Version 6, OID 1.2.276.0.76.5.338)
Realm: German

Code	Description	Entity
N0	No regional lymph node metastasis	All
N1		
N1mi	Bilateral regional lymph node metastasis	Vulva
N1a		all
N1b		
N1b1		
N1b2		
N1b3		
N1b4		
N1c		
N2		
N2a		
N2b		
N2c		
N3		
N3a		
N3b		
N3c		
Nx	Regional lymph nodes cannot be assessed	

2.2.3 Metastasen (QRPH-M-classification)

CONF-13: For the German realm the `QRPH-M-classification value set` **SHALL**
990 be bound to the following table (OID 1.2.276.0.76.5.339).

M-classification Value Set

LOINC = ????

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Value Set: ???? Code System: Metastasen-Codes (Version 6, OID 1.2.276.0.76.5.339)		
Realm: German		
Code	**Description**	**Entity**
M0	No distant metastasis	Alle
M1	Distant metastasis	Alle
M1a		nur Ösophagus und Prostata
M1b		nur Ösophagus und Prostata
M1c		
M1d		
M1e		
Mx	Distant metastasis cannot be assessed	Alle

2.2.4 Residualtumor

Residualtumor Value Set

LOINC = ????	
Value Set: ???? Code System: Residualtumor-Codes (OID ??????)	
Realm: German	
Code	**Meaning**
R0	No residual tumor
R1	Microscopic residual tumor
R2	Macroscopic residual tumor
R2a	
R2b	
Rx	Presence of residual tumor cannot be assessed

2.2.5 Staging

995 Staging Value Set

LOINC = ????	
Value Set: ???? Code System: Stadiengruppierung (OID ??????)	
Realm: German	
Code	**Meaning**
Okk	
0	
0a	
0is	

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I	
IA	
IA1	
IA2	
IB	
IB1	
IB2	
IC	
II	
IIA	
IIA1	
IIA2	
IIB	
IIC	
III	
IIIA	
IIIB	
IIIC	
IS	
IV	
IVA	
IVB	
IVC	

2.2.6 Vene invasion

Vene Invasion Value Set

LOINC = ????

Value Set: ????

Code System: Veneninvasion-Codes (OID ??????)

Code	Meaning
V0	no venous invasion
V1	microscopic venous invasion
V2	macroscopic venous invasion
Vx	venous invasion cannot be assessed

2.2.7 Lymphsystem invasion

Lymphsystem Invasion Value SetLOINC = ????

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Value Set: ???? Code System: Lymphsysteminvasion-Codes (OID ??????)	
Code	**Meaning**
L0	no lymphatic invasion
L1	lymphatic invasion
Lx	lmphatic invasion cannot be assessed

2.2.8 Neuralscheideninvasion

1000 Neuralscheiden Invasion Value Set

LOINC = ????	
Value Set: Neuralscheideninvasion-Codes (OID ??????) Code System: ???	
Code	**Meaning**
Pn0	
Pn1	
Pnx	Unknown

2.2.9 Qualifier

TNM qualifier Value Set

LOINC = ????	
Value Set: ???? Code System: TMN-Qualifier (OID 1.2.276.0.76.5.340)	
Code	**Meaning**
C	Clinical
P	Pathological
R	
Y	

2.2.10 Certainty

Certainty Value Set

LOINC = ????	
Value Set: ???? Code System: Certainty Factor-Codes (OID 1.2.276.0.76.5.341)	
Code	**Meaning**
C1	Evidence from standard diagnostic means (e.g., inspection, palpation, and standard radiography, intraluminal endoscopy for tumors of certain organs)

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C2	Evidence obtained by special diagnostic means (e.g., radiographic imaging in special projections, tomography, computerized tomography [CT], ultrasonography, lymphography, angiography; scintigraphy; magnetic resonance imaging [MRI]; endoscopy, biopsy, and cytology)
C3	Evidence from surgical exploration, including biopsy and cytology
C4	Evidence of the extent of disease following definitive surgery and pathological examination of the resected specimen
C5	Evidence from autopsy

1005

2.2.11 Lokalisation von Metastasen

Metastasen-Localisation Value Set

LOINC = ????	
Value Set: ???? Code System: Metastasen-Lokalisation-Codes (OID 1.2.276.0.76.5.?????)	
Code	**Meaning**
PUL	Pulmonary
OSS	Osseous
HEP	Hepatic
BRA	Brain
LYM	Lymph Nodes
OTH	Others
MAR	Bone Marrow
PLE	Pleura
ADR	Adrenals
SKI	Skin

2.3 Codes für Gleason-Score

1010 Gleason Score Value Set

LOINC = ????	
Value Set: ???? Code System: Entdifferenzierungsgrad nach Gleason-Score (OID 1.2.276.0.76.5.??????)	
Code	**Meaning**
1	
2	
3	
4	

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5	

Wachstumsmuster according to Gleason Score Value Set

LOINC = ????	
Value Set: ???? Code System: Wachstumsmuster nach Gleason-Score (OID 1.2.276.0.76.5.??????)	
Code	**Meaning**
1	
2	
3	
4	
5	

Grading according to Gleason Score Value Set

LOINC = ????	
Value Set: ???? Code System: Grading nach Gleason-Score (OID 1.2.276.0.76.5.??????)	
Code	**Meaning**
2	
3	
4	
5	
6	
7	
8	
9	
10	

1015

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