

California Cancer Registry Electronic Pathology Reporting Standards Implementation Guide



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1 Introduction

California recently passed legislation which requires all pathologists diagnosing cancer to report cancer pathology reports to the California Cancer Registry (CCR) pursuant to California Health and Safety Code (HSC) 103885. Assembly Bill (AB) 2325 signed by California Governor Jerry Brown on September 14, 2016, revised HSC 103885 to require pathologists to report cancer diagnoses electronically to CCR by January 1, 2019. This implementation guide serves as the initial work effort of CCR to provide pathologists the information needed to meet this new cancer reporting mandate.

2 Background

CCR is a statewide population-based cancer registry authorized by HSC 103885. CCR is recognized as one of the leading cancer registries in the world and has been the cornerstone of a substantial amount of research on cancer in the California population.

Prior to passage of AB 2325, most cancer cases were reported to CCR by hospitals and treatment facilities through hospital abstracting services and were not reported to CCR for 6-12 months or more after cancer diagnosis. The delay in receiving these cases limited the uses of this data to more historical, retrospective surveillance research purposes. With the passage of AB 2325, CCR will now receive a cancer incidence case electronically in near-time, which allows a broader use of the data including responding to community cancer concerns with more timely data, identifying data for research studies requiring rapid identification of cancer cases, and clinical trials matching.

3 Purpose

This CCR Electronic Pathology Reporting Standards Implementation Guide contains the necessary specifications for the implementation of standardized data transmissions from a pathology lab or pathology lab information system to CCR. A single standardized method will allow efficient and accurate transmission of cancer information while reducing the burden on laboratory system specific implementations. This implementation guide defines the specific data elements to be retrieved and included in the cancer pathology reports; describes how to create the appropriate, valid electronic message for transmission; and details how to transmit the cancer pathology report to CCR over a secure electronic transmission mechanism (see Data Format section for details). Transport mechanisms between a Laboratory Information Systems (LIS) or Electronic Health Record (EHR) to CCR have also been defined and included in this implementation guide.

4 Effective Date of Electronic Reporting of Pathology Reports Pathologists are to report cancer diagnoses electronically to CCR beginning January 1, 2019.

5 Pathologist Reporting Requirements

It is the responsibility of the original pathologist to report all cancer diagnoses, as detailed under Reporting Criteria. Any slide review, second opinion, report correction, addendums, etc. related to the original specimen diagnosis that either change the original incidence of cancer (i.e., reportable to non-reportable, or vice versa) or changes the histology and/or behavior of the original specimen is to be electronically transmitted to CCR by the original pathologist within two weeks of finalizing the revised pathology documentation.

5.1 Registration Process

Pathology labs and/or facilities are required to register for reporting on behalf of represented pathologists within an organization or lab. Registration information includes specific contact information, inclusive of a lead physician contact, lab management contact, and a technical interface contact, as well as LIS and/or EHR vendor information for the purpose of providing a certificate for submission to the web service where applicable.

5.2 Transmission Methods

CCR will accept electronic pathology reports through four methods of transmission:

- A web service
- Secure File Transfer Protocol (SFTP)
- Minimal Lower Layer Protocol (MLLP)
- Direct Data Entry Web Portal.

5.3 Data Format

CCR is limiting the formatting of pathology reports to four options:

- Simple Narrative
- Synoptically Structured Health Level Seven (HL7)
- Synoptically Structured HL7 using College of American Pathologists (CAP) Electronic Cancer Checklist (eCC)
- CAP eCC Structured Data Captured(SDC) Extensible Markup Language (XML)

5.4 Reportable Diagnoses Criteria

All reportable neoplasms meeting the criteria below are to be transmitted to the CCR. Neoplasms outlined under the Non-Reportable Diagnoses are not to be transmitted. In the event an ambiguous term(s) precede a reportable cancer diagnoses, the case is to be considered reportable. Examples of ambiguous terminology include, but are not limited to the following: apparently, appear to, suspicious, likely or most likely, favors, comparable, consistent with, typical (of), probable, presumed, malignant appearing.

Reportable Diagnoses

- 1. Invasive malignancies
- 2. In Situ malignancies
 - a. Pathology reports with the following terms indicate in situ behavior and are reportable:

General Reportable Terms Indicating In Situ Behavior									
Bowen's disease (excluding skin)									
Confined to epithelium (does not extend beyond base membrane)									
Ductal Carcinoma In situ (any site)									
Intracystic, Intraepidermal (NOS), Intrasquamous, In Situ									
Intraepithelial Neoplasia, Not Otherwise Specified (NOS), Grade III									
Involvement up to, but not including basement membrane									
Non-Infiltrating; Non-Invasive									
SIN III (squamous intraepithelial neoplasia (excluding cervix)									
LCIS (lobular carcinoma in situ)									
No stromal invasion									
Papillary, non-infiltrating or intraductal									
Pre-invasive Pre-invasive									
Site Specific Terms Indicating									
In Situ Behavior									
Anus – Anal Intrepithelial Neoplasia (AIN III)									
Breast									
Ductal intraepithelial neoplasia (DIN III)									
Lobular intraepithelial neoplasia (LIN III)									
Lobular Neoplasia (LN III)									
Lobular, non-infiltrating (carcinoma only)									
Breast, Colon, Rectum									
Stage 0 (excluding Paget's disease) confined to lamina propria									
Larynx – Laryngeal intraepithelial neoplasia (Larynx)									
Pancreas – Pancreatic intraepithelial neoplasia III (PanIN III)									
Penis									
Penile intraepithelial neoplasia II (PeIN III)									
Queyrat's erthroplasia									
Skin									
Clark's Level I (melanoma; limited to epithelium)									
Hutchinson's melanotic freckle, Not Otherwise Specified NOS)									
Lentigo maligna									
Precancerous melanosis									
Vagina – Vaginal entraepithelial neoplasia (VAIN III)									
Vulva – Vulvar intraepthileial neoplasia (VIN III)									

- 3. Benign and borderline intracranial and/or Central Nervous System (CNS) tumors
- 4. All Hematopoietic and lymphoid neoplasms as outlined in the following link: http://seer.cancer.gov/seertools/hemelymph are reportable.
- 5. Carcinoid Tumors, NOS of the Appendix.
- 6. Severe or high-grade dysplasia, documented as being synonymous with carcinoma.
- 7. Neuroendorine tumor when the diagnosis is insulinoma.

- 8. Cystic Pancreatic Endocrine Neoplasm (CPEN).
- Cystic pancreatic endocrine specified as neourendorcrine tumor, grades 1 and 2
- 10. Solid pseudopapillary neoplasm of pancreas.
- 11. Non-Invasive Mucinous Cystic Neoplasm (MCN) of pancreas with high grade dysplasia.
- 12. Mature teratoma of the testes in adult.

Non-Reportable Diagnoses

- 1. Basal and squamous cell carcinoma of the skin, unless it occurs on the genital organs (vulva, scrotum and penis). Specifically, do not report the following histologies occurring in the skin:
 - Neoplasms, malignant, NOS of the skin
 - Epithelial carcinomas of the skin
 - Papillary and squamous cell carcinomas of the skin
 - Basal cell carcinomas of the skin
- 2. Carcinoma in situ (CIS) or intraepithelial neoplasia grade III (CIN III) of the cervix.
- 3. Benign and borderline neoplasms that are not primary intracranial and/or CNS neoplasms.

5.5 Reportable Pathology Report Types

The following types of pathology reports for reportable neoplasms are to be transmitted to CCR:

Surgical Pathology Reports:

- o Biopsy (Needle Core, Excisional, Incisional, Bone Marrow Aspirates)
- o Surgical Resection
- Surgical Re-excision
 NOTE: All pathology reports for Surgical Resection or Surgical Re excision of malignant melanoma or lentigo should be submitted. This
 includes both positive and negative findings (i.e., Wide Re-Excision: No
 residual melanoma; or negative for melanoma, etc.)

Cytology Reports:

- Biopsy (fine needle aspiration)
- Brushings (e.g., endoscopic evaluation of pancreas, Papanicolaou (PAP) smear)
- Fluids (Urine, Peritoneal, Pleural, Cerebrospinal Fluid, Broncheoalveolar lavage)
- Hematologic Specific Reports
 - Immunohistochemistry (IHC)
 - Peripheral Blood Count
 - Flow Cytometry

- Molecular Reports
 - Molecular Diagnosis Polymerase Chain Reaction (PCR)
 - Reverse Transcription (RT)-PCR
 - Sequencing (Next-Generation Sequencing [NGS], Pyrosequencing, etc)
 - In Situ Hybridization (ISH)
 - Fluorescent In Situ Hybridization (FISH)
 - Gene Array
- Consults
- Slide Reviews
- Biomarker results
- Pathology Report Addenda

5.6 Required Data Elements

CCR requires various facility and patient information in order to successfully match pathology information to existing patients in its database and/or to match to the criteria for research studies/clinical trials. Other patient demographic items are also essential for epidemiological incidence and mortality research. CCR recognizes that not all facility/patient information may be available to all pathologists. Thus, to help CCR serve its public health mission to improve cancer patient outcomes, a cooperative effort is encouraged to provide this kind of data. It is likely that ordering facility/office EHR systems will contain many of these facility/patient data elements, so CCR recommends that LIS vendors work with ordering facilities/offices and their EHR vendors to enable these kinds of data elements to be transmitted to CCR. Given different work flows and different levels of integration between EHR systems and LIS systems, there may be multiple facility-specific methods to achieve this goal.

5.7 Annual Review and Revision

This Implementation Guide is the reference document to be used by pathologists for reporting cancer through December 31, 2019. Subsequently, a CCR Electronic Pathology Standards Manual will be available on line to serve as the reference document for pathologists and pathology. This manual will be revised and updated on an annual basis in order to incorporate required North American Association of Central Cancer Registries (NAACCR) changes and updates. CCR will notify pathologists, pathology labs, and LIS vendors when the final manual is published and when updates to the manual are released.

6 Technical Implementation

6.1 Registration Portal

Pathology labs and/or facilities are required to register for reporting on behalf of represented pathologists within an organization or lab. Registration information includes specific contact information, inclusive of a lead physician contact, lab management contact, and a technical interface contact, as well as LIS and/or EHR vendor information. Registration also requires an organization or laboratory to select a preferred method of reporting. Methods of Reporting Include:

- HL7 Standard Protocol version 2.5.1, using North American Association of Central Cancer Registries Volume 5 and California defined constraints
- SDC Technical Framework using CAP ECC
- Direct Data Entry Web Portal

Please note that the Direct Data Entry Web Portal is only an option for Pathology labs and/or facilities that are not able to report electronically via an interface using HL7 2.5.1 or IHE SDC CAP ECC.

The Registration Portal can be accessed via the URL:

https://pathreporting.ccr.ca.gov/registration/

6.2 Identifying Reportable Cancers

Pathology labs reporting to CCR are required to implement filtering for reportable cancer cases. There are multiple approaches in which to implement filtering logic to disseminate reportable cancers. Options include using an ICD-10 list, ICD-02/ICD-03 list or a Cancer Case Finding Selection Criteria Word List. Specific codes associated with ICD reportable lists are referenced below please click on the hyperlink to view. Specifics relative to the NAACCR Path Lab Search Terms are referenced below please click on the hyperlink to view. CCR is not authorized to retain information on non-reportable neoplasms.

6.2.1 International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM):

http://www.ccrcal.org/pdf/AB2325/CA ICD-10-CM.xlsx

6.2.2 NAACCR Path Lab Search Terms:

https://www.naaccr.org/naaccr-path-lab-search-terms/

6.2.3 International Classification of Diseases for Oncology (ICDO-3)

ICDO-3 is used by National Cancer Institute (NCI) INCLUSIONS:

- All neoplasms diagnosed prior to the year 2001 with a behavior code of '2' or '3' in the International Classification of Diseases for Oncology, Second Edition (ICD-O-2) are reportable.
- All neoplasms diagnosed in 2001 and later with a behavior code of '2' or '3' in the International Classification of Diseases for Oncology, Third Edition (ICD-O-3) are reportable.
- Epithelial carcinomas (8010-8046) in ICD-O-2 or ICD-O-3 are reportable for sites other than skin (C44.0-C44.9) including but not limited to vagina, clitoris, vulva, prepuce, penis and scrotum (sites C52.9, C51.0-C51.9, C60.0, C60.9, and C63.2).
- If a '0' or '1' behavior code term in ICD-O-2 or ICD-O-3 is verified as in situ, '2', or malignant, '3', by a pathologist, these cases shall be reportable.

• Tumors of the brain and central nervous system (C70.0-C72.9, C75.1-C75.3) with a behavior code of '0' or '1' beginning with January 1, 2001 diagnoses are reportable.

EXCLUSIONS:

- Cervix carcinoma in situ are not reportable after January 1, 1996.
- The following exclusions based on histology and site and are not reportable:
 - 8000-8005: Neoplasms, malignant, NOS of the skin (C44.0-C44.9)
 - o 8010-8046: Epithelial carcinomas of the skin (C44.0-C44.9)
 - 8050-8084: Papillary and squamous cell carcinomas of the skin (C44.0-C44.9)
 - o 8090-8110: Basal cell carcinomas of the skin (C44.0-C44.9)

6.3 Reportable Pathology Report Types

The following types of pathology reports that provide information on reportable neoplasms are to be transmitted to CCR:

Surgical Pathology Reports:

- Biopsy (Needle Core, Excisional, Incisional, Bone Marrow Aspirates)
- Surgical Resection
- Surgical Re-excision

Cytology Reports:

- Biopsy (fine needle aspiration)
- o Brushings (e.g., endoscopic evaluation of pancreas, PAP smear)
- Fluids (Urine, Peritoneal, Pleural, Cerebrospinal Fluid, Broncheoalveolar lavage)
- Hematologic Specific Reports
 - Immunohistochemistry (IHC)
 - Peripheral Blood Count
 - Flow Cytometry

Molecular Reports

- Molecular Diagnosis PCR
- o RT-PCR
- Sequencing (NGS, Pyrosequencing, etc)
- o ISH
- o FISH
- Gene Array
- Consults
- Slide Reviews
- Biomarker results
- Pathology Report Addenda

6.4 Required Data Elements

All data elements listed below with the California Cancer Registry NAACCR Volume 5 Version 4.0 – HL7 2.5.1 Constraints Document are required or required if accessible. If a data element is required, it must be transmitted with a value other than empty, blank, or null. For a data element that is required if available, it must be sent when a known value is accessible, although an empty value is allowed when no other allowable value is accessible. However, if a data element has an allowable code for "unknown", then that code should be transmitted for that element instead of an empty value.

California Cancer Registry NAACCR Volume 5 Version 4.0 HL7 2.5.1 Constraints Link: http://www.ccrcal.org/pdf/AB2325/CA_Volume_V_constraints.xlsx

NAACCR Volume 5 Version 4.0 Link:

https://www.naaccr.org/pathology-laboratory-electronic-reporting/

California Cancer Registry NAACCR Volume 5 Version 4.0 - HL7 2.5.1 Constraints Document - December 27, 2018

NAACCR Volume 5 Version 4.0 Link:

https://www.naaccr.org/pathology-laboratory-electronic-reporting/

Definition of CCR Requirement optionality for R and RE

R - Required to be populate or message will be rejected; NAACCR and HL7 requirement.

RE - If facility has access to data, facility is required to populate.

HL7 Segment / Ref#	HL7 Item	CCR Require ment	Required Data Format for California Cancer Registry	Example Data	Repeat?	Notes for implementation
Message F	leader (MSH) Segment	R			NO	
MSH-1	Field seperator	R			NO	Fixed value character
MSH-2	Encoding characters	R	^~\&	^~\&	NO	Fixed value string
MSH-3	Sending application	R	Application name or abbreviation of LIS system	Cortex, Copath, Local LIS system	NO	Site specific
MSH-4	Sending facility	R	Official name of lab^ID number^id type (CLIA, CALIF, or NPI)	NQML^05D0599859^CLIA	NO	Facility specific
MSH-4.1	namespace ID	R	Name of organization or facility	NQML	-	Neither table 361 nor table 300 will be required for conformance testing
MSH-4.2	universal ID	R	Identifier of organization or facility	05D0599859	_	table 362 will not be used conformance testing
MSH-4.3	universal ID type	R	code for type of identifier (usually CLIA for labs, but CALIF assigned numbers or NPI numbers may also be sent)	CLIA	-	CALIF=Reporting source numbers assigned by the California Cancer Registry)
MSH-5	Receiving application	R	simple string	Eureka	NO	literal fixed string
MSH-6	Receiving facility	R	CCR	CCR	NO	literal fixed string
MSH-7	Date/time of message	R	YYYYMMDDHHMMSS	20070221120813	NO	should be to the second or less
MSH-9	Message type	R	v2.5.1 MSG datatype (3 required components)	ORU^R01^ORU_R01	NO	literal fixed string

MSH-10	Message control ID	R	follow NAACCR recommendation: YYYYMMDDHHMMSS####	200702211208130017	NO	could be a GUID or any other unique (per message) identifier
MSH-11	Processing ID	R	P for production, T for training, D for debugging	Р	NO	
MSH-12	Version ID	R	Code according to NAACCR Volume V/HL7 table 0104 in NAACCR e-path reporting standards	2.5.1	NO	literal fixed string; when using Volume V version 4.0 for eCC reporting, it is always HL7 version 2.5.1
MSH-21	Conformance statement ID	R	NAACCR Standards for Cancer Registries, Volume V, Pathology Laboratory Electronic Reporting version number (version 4.0)	VOL_V_40_ORU_R01^NAACCR_C P	NO	
Patient Id	entification (PID) Segment	R			NO	These patient demographic items are all critical pieces of information needed to help the cancer registry fulfill its mission, and thus they are required if accessible and known. They facilitate patient matching in order to consolidate information from different sources; they are used to select patients for clinical trials and other types of studies; and they are foundational in epidemiological cancer research. In addition, CAP requires specimens to be labeled with 2 out of these 3 items for accreditation: Name, DOB, medical record number. So if these patient items are accessible to you and known in your primary system, in other systems, or in paper form, please obtain and transmit as many of them as possible to help facilitate lifesaving cancer research. Given the importance of this data, the CCR encourages software vendors, labs, and ordering facilities/offices to work together to make information not

						usually available to labs available for transmission via system integration or requisition requirements. Thank you.
PID-1	Set ID PID	R	1	1	NO	
PID-3	Patient identifier list	RE	NAACCR, Volume V requirements to capture medical record number, social security number, medicare beneficiary identifier, and internal and external lab patient Ids including ID type and assigning facility official name, Id number, and ID type for each facility's number; external patient Ids required when referred from other lab	010203040^^^NQM&000028104 7&CALIF^MR~999999999^^^USS SA^SS~12312312^^^SJHCNC&3D 1234567&CLIA^PI OR 010203040^^^STJ&1881786044& NPI^MR~111223333^^USSSA^S S~97 810430^^HITECK PATH LAB-ATL&3D9328409&CLIA^PI	YES for MR, SS, MC, PI, PT, AN in that order as available	Each patient identifier must include an assigning facility/office/entity. For MRNs, use CALIF assigned ID number or NPI number; for SSN, just use USSSA (no assigning authority ID number or type); for medicare beneficiary number, just use CMS (no assigning authority ID number or type); and for PI and PT numbers, use CLIA, CALIF, or NPI numbers. CAP requires specimens to be labeled with 2 out of these 3 items for accreditation: Name, DOB, medical record number. NAACCR Volume V requires this field with at least one known patient identifier sent, even if it is just the lab's identifier for the patient. It is required or empty here because of the standard in AB2325 only requiring demographic data if it is known and accessible. But MRN and SSN are key patient linkage/matching identifiers for the

					cancer registry, so please try to obtain them and send them if accessible and known. Medicare Beneficiary Identifier would also be of great use to the registry for patient linkage/matching, particularly if SSN is not available, so please try to obtain it and send it too. To simplify things, unlike Volume V, the first assigning authority component (component 4) is used to identify both entities like USSSA & CMS and facilities, rather than using component 4 for entities and component 6 for facilities.
PID-3.1	ID Number	R	string of the identifier for the Patient	10203040	
PID-3.4	Assigning Authority	R	string identifying the assigning organization	NQM&0000281047&CALIF	
PID-3.4.1	Namespace ID	R	"USSSA" for social security numbers, otherwise the name or mnemonic of the organization that assigned the identfier	NQM	-
PID-3.4.2	Universal ID	RE	Assigning authority/facility's ID number	0000281047	

PID-3.4.3	Universal ID Type	RE	Assigning authority/facility's ID number type; use CALIF for CCR-assigned ID numbers, NPI, or CLIA (SSN doesn't need one as a facility ID number is not needed)	CALIF		
PID-3.5	identifier type	R	MR - medical record number, SS - Social Security Number, PI - Patient Internal Identifier, PT – External lab's patient ID number, or AN - account number	MR		CCR prefers MR and SS for the identifiers. AN (account number) is not preferred, as it may be different for different visits. The PI number should be the same across visits (the master ID for the patient in the institution).
PID-5	Patient name	RE	Last name^first name^middle name^name suffix	SMITH^JOHN^M^Esq^Sir^^L	YES, primary/I egal name reported first.	NAACCR Volume V requires this field, but it is required or empty here because of the standard in AB2325 only requiring demographic data if it is known and accessible. However, it is a key patient linking/matching identifier for the cancer registry and the medical community, so please try to obtain and send it if possible. CAP requires specimens to be labeled with 2 out of these 3 items for accreditation: Name, DOB, medical record number.
PID-5.1	Family Name	R	uppercase or mixed case string	SMITH		If reporting EHR/LIS system tracks names in one big field, please separate family/last name from other fields to submit here; also, if name suffix is included with family name in EHR/LIS system, please strip it out and send it in PID-5.4 for transmitted message

PID-5.2	Given Name	R	uppercase or mixed case string	JOHN		If first name and middle name are combined into one big field or a first name field in EHR/LIS system, separate them, submit first name here, and submit any additional name(s) as a middle name (PID-5.3)
PID-5.3	Middle and other names	RE	uppercase or mixed case string	М		may contain all of the name data that is not the surname or first name
PID-5.4	Suffix	RE	uppercase or mixed case alphabetic string	Esq		
PID-5.5	Prefix	RE	uppercase or mixed case string	Sir		
PID-5.7	Name Type Code	RE	codes from NAACCR Volume V/HL7 table 0200: L - legal name A - Alias name D - Display name M - maiden name (nee) N - nickname B - Birth name	L A M		if not populated, this is considered the legal name (same as name type code 'L')
PID-7	Date/time of birth	RE	YYYYMMDD	19750202	NO	Key patient identifier for the registry (and the medical community), so please try to obtain and send if accessible and known; CAP requires specimens to be labeled with 2 out of these 3 items for accreditation: Name, DOB, medical record number; do not populate time, only date
PID-8	Sex	RE	codes suggested from HL7 table 0001: F=Female, M=Male, H=Hermaphrodite, Undetermined, T=Transsexual, O=Other, U=Unknown (NAACCR Vol V table 0001)	M	NO	Key patient linkage/matching identifier for registry and the medical community, so please try to obtain and send if accessible and known.

PID-10	Race	RE	CDCREC race code^CDCREC race name^race coding system D73	2034-7^Chinese^CDCREC 2054-5^Black or African American^HL70005	YES/5 maximu m	Race is a critical piece of information for cancer research, so please obtain and transmit it if accessible and known. If multiple races are accessible, please send up to five using the repeats. The CCR needs as much race specificity as possible using the CDC Race and Ethnicity Codes (CDCREC). So if the patient's race(s) are known and accessible, please convert your race code(s) to the corresponding CDCREC code(s) and text for transmission, and include CDCREC as the coding system. The CDCREC version 1.2 race codes are listed on a separate sheet in this constraints file. The CDC's hierarchy code column is included to show which race codes represent subgroups. Note that most European and North African/Middle Eastern races are in the White hierarchy, so please use the generic codes for those areas if one's country is not listed. Some additional country/continent/ethnicity terms have been listed from CCR abstracting standards for the generic white categories as examples to help know when to use those race codes. U has also been added for use when race is accessible but unknown. Do not send U if the race is inaccessible (just leave race out of the message instead).
						when to use those race codes. U has also been added for use when race is accessible but unknown. Do not send

					associated CDCREC codes and U (shaded in green) at a minimum and send HL70005 as the race coding system. Please do not mix race and ethnicity codes. A patient with a hispanic or latino ethnicity may have any race.
PID-10.1	Identifier	R	appropriate code from the CDCREC Races sheet	2034-7	
PID-10.2	Text	R	appropriate text from the CDCREC Races sheet	Chinese	
PID-10.3	Name of Coding System	R	CDCREC or HL70005	CDCREC	If races captured only translate to the general race categories, use HL70005 here, but otherwise use CDCREC if more specificity is available.

PID-11	Patient address	RE	Street address^other designation^city^state^zip code^country^address type^^County/Parish Code	2188 Wells #25^Lakeshore Apartments^sacramento^CA^958 15^USA^H^^CA067 OR, if unknown, UNKNOWN^^UNKNOWN^CA^99 999^USA^BR^^CA000	NO	Repeats allowed in NAACCR Volume V, but registry can only use one address at a time. Patient address including county are key data items for epidemiology at registries, so please send if accessible or send unknown values. If multiple addresses are available, please send the address where the patient was living at the the time the specimen was collected. If the patient has a separate mailing address (e.g., PO BOX number) in addition to their residential address at that time, please send the residential address. But send a PO BOX address if that is all that is available. The CCR will use this address as a both a preliminary residential address at diagnosis for incidence research and a preliminary contact address for follow-up activities. Include apartment/suite number at the end of the street address (rather than entering it in other designation). Mixed case is allowed. Embedded spaces are allowed. Special characters are limited to periods, slashes, hyphens, and pound signs. Enter UNKNOWN if the address is accessible but unknown. Leave blank if address is not accessible.
PID-11.1	Street Address	R	uppercase or mixed case string; Mixed case is allowed. Embedded spaces are allowed. Special characters are limited to periods, slashes, hyphens, and pound signs.	2188 Wells Dr #25		Patient's residential street address when specimen was collected. Include apartment/suite number at the end of the street address (rather than entering it in other designation). This is different than NAACCR Volume V's instructions because e-path reports are used to begin cases at the registry, and the data standards case

					addresses are different. UNKNOWN if the address is accessible but unknown. Leave blank if address is not accessible.
PID-11.2	Other Designation	RE	uppercase or mixed case string	Lakeshore Apartments	Patient's residential address supplemental information when specimen was collected. Enter any additional information such as the name of an apartment complex or nursing facility, a building number, etc. Enter apartment numbers at the end of the street address field rather than here.
PID-11.3	City	R	uppercase or mixed case string	Sacramento	Patient's residential address city when specimen was collected. Enter UNKNOWN if the address is accessible but unknown. Leave blank if address is not accessible.
PID-11.4	State	R	2-letter state/province abbreviation	CA	Patient's residential address state when specimen was collected. See States and Provinces sheet for list of CCR preferred abbreviations. Enter ZZ if the address is accessible but unknown. Leave blank if address is inaccessible.
PID-11.5	Zip Code	R	valid postal code, 888888888, 999999999, or blank if address is not accessible	95815	Patient's residential address postal code when specimen was collected. Zip-5 or Zip+4 (9 characters) for US; other country's postal code; for US and Canada, if postal code is accessible but unknown, then send 99999999; for countries other than US and Canada, if postal code is accible but unknown, then send 88888888. Send blank if address is not accessible.

PID-11.6	Country code	RE	3 letter ISO country code uppercase	USA	Patient's residential address country when speciman was collected. Leave blank if address is not accessible.
PID-11.7	Address Type	RE	code from NAACCR Volume V/HL7 table 0190: H - home, M - mailing, B - business, P - permanent, N - birth, BR - residence at birth, L - legal, F - country of origin, C - current or temporary	H	Home/residential address (H) at time specimen was collected preferred; use type M for PO box addresses
PID-11.9	County/Parish Code	RE	Use FIPS code with state abbreviation prefix for CA counties (i.e., CA067 = California, Sacramento County); or CA000, CA998, or CA999	CA067	Patient's residential address county when specimen was collected. This field is critical for epidemiological research by the registry, so please obtain it and submit it if it is accessible and known. For California counties, according to FIPS guidance, include the 2-letter state code (e.g., CA067 represents Sacramento County, CA). A look-up tool can be found at https://www.census.gov/geo/referen ce/codes/cou.html. California, county unknown or other USA state = CA000; Non-USA = CA998; and Unknown, but not California = CA999

PID-13	Phone number – home	RE	Patient's personal phone number; used as the patient's contact number	^PRN^PH^^1^415^3449876	NO	NAACCR Volume V allows repeats (multiple phone numbers) but the registry does not. The CCR only tracks one latest, primary personal phone number for the patient (i.e., primary residence phone number or cell phone number). It is used to contact the patient directly and follow up on their status, and it may be used to contact them if they agree to participation in a study. Using work numbers/institutional numbers may risk patient confidentiality, so please keep that in mind and only send the patient's latest primary personal contact number. If a primary personal number is accessible but unknown, then send 999^9999999 in the number components. If it is accessible but noted that the patient has no personal phone number (e.g., homeless), then send 000^0000000 in the number components. If it is not accessible, then do not send a PID-13 value.
PID-13.2	Telecommunication Use Code	RE	code from NAACCR Volume V/HL7 table 0201: PRN - Primary Residence Number, ORN - Other residence number, WPN - work number, EMR - emergency number, VHN - vacation home number, ASN - answering service number, BPN - beeper number, NET - email address only	PRN		

PID-13.3	Telecommunication Equipment Type	RE	code from NAACCR Volume V/HL7 table 0202: PH - voice telephone, FX - fax, MD - modem, CP - cell phone, BP - beeper, TDD - tone device for the deaf, X.400 and "Internet" for DNS and network addresses only	PH		generally only use codes PH and CP.
PID-13.5	Country Code	RE	1 is the code for US numbers	1		Always default to '1' or use the real code if it is a foreign number
PID-13.6	Area/City Code	RE	3 digits in the US	415		
PID-13.7	Local Number	RE	4 digits in the US	3449876		
PID-13.8	Extension	RE	generally no more than 7 digits			
PID-13.9	Any Text	RE				use for general comments such as "after 6PM", "weekdays", etc.
PID- 13.10	Extension Prefix	RE	generally no more than 7 digits			
PID- 13.11	Speed Dial Code	RE				
PID- 13.12	Unformatted Telephone number	RE				use only for non-numeric numbers, such as "1-866-4HEALTH"
PID-16	Marital status	RE	A=Separated, D=Divorced, M=Married, S=Single, W=Widowed (NAACCR Volume V table 0002, subset of HL7 table 0002)	S^Single^HL70002	NO	
PID-16.1	Identifier	R	single character code from NAACCR volume V/HL7 table 0002	S		
PID-16.2	Text	R	display text for code from table	Single		
PID-16.3	Name of Coding System	R	table number as per HL7 standard	"HL70002"		if component 1 (identifier) is populated, this must also be populated.

PID-17	Religion	RE	NAACCR Volume V/HL7 table 0006 code	BUD^Buddhist^HL70006	NO	
PID-17.1	Identifier	R	3 character string	BUD		
PID-17.2	Text	R	display text for code from table 0006	Buddhist		
PID-17.3	Name of Coding System	R	HL7 table 0006, also in NAACCR Volume V v4.0	HL70006		if component 1 (identifier) is populated, this must also be populated.
PID-22	Ethnic group	RE	ethnicity code^ethnicity text^ethnicity coding system+D74	2148-5^Mexican^CDCREC or 2135-2^Hispanic^HL70189 or H^Hispanic orLatino^HL70189	NO	Ethnic group is a critical piece of information for cancer research, so please obtain and transmit it if accessible and known. A maximum of one ethnic group can be used by the registry, despite NAACCR volume V allowing 4 repeats. The CCR needs as much specificity as possible using the CDC Race and Ethnicity Codes (CDCREC). So if the patient's ethnic group is known and accessible, please convert your ethnic group code to the corresponding CDCREC code and text, and include CDCREC as the coding system. The CDCREC version 1.2 ethnicity codes are listed on a separate sheet in this constraints file. The CDC's hierarchy code column is included in that sheet to show which ethnicity codes represent subgroups. U has been added for use when ethnicity is accessible but unknown. Do not send U if the ethnic group is inaccessible (just leave ethnic group out of the message instead). However, if the ethnicity coding system used locally is limited to general categories of hispanic or latino, not hispanic or latino, or unknown, then please send the associated CDCREC codes and U (shaded in green) at a minimum and send HL70189 as the ethnic group

					coding system. H (Hispanic or Latino), N (NOT Hispanic or Latino), and U (Unknown) are also accepted for those using that alternative general HL70189 table code set. Please do not mix race and ethnicity codes. A patient with a hispanic or latino ethnicity may have any race.
PID-22.1	Identifier	R	Ethnicity code from CDCREC sheet or H, N, or U	2148-5	
PID-22.2	Text	R	Text from the CDCREC ethnicities sheet for the chosen ethnicity code; or text for H, N, U if using the alternative HL70189 codes (Hispanic or Latino, Not Hispanic or Latino, or Unknown)	Mexican	
PID-22.3	Name of Coding System	R	CDCREC or HL70189	CDCREC	If ethnic groups captured only translate to the general ethnicity categories, use HL70189 here, whether using the CDCREC generic codes or the alternative H, N, or U

						codes.
PID-23	Birth place	RE	Location of patient's birth, per NAACCR Volume V	St. Francis Community Hospital of Lower East Side	NO	unformatted string value; use instead of address type N or BR
PID-29	Patient death date and time	RE	YYYYMMDD	20050202	NO	does not need to be more accurate than to the day
PID-30	Patient death indicator	RE	Y=Dead, N=Alive	N	NO	must be populated if patient is deceased; if not populated assumed to be "N" (alive)
Next of Ki Segment	in/Associated Parties (NK1)	RE			NO	If a contact other than the patient is accessible and known, please send the most recently captured person and their most recent contact information as this is important information for cancer research. Follow-up activities are performed with cancer patients in order to keep tracking them throughout their lives for survival analysis and other types of research, and often someone other than the patient is needed to get this information. Required for minors and legal incompetency.
NK1-1	Set ID – NK1	RE	1 (only one other contact required if available)	1		and regar moonspecency.
NK1-2	Name	RE	other follow-up contact (not the patient: last name^first name^middle name^^^^L	SMITH^JOSEPH^M^^^L	NO	L=legal name
NK1-2.1	Family Name	R	uppercase or mixed case string	Smith		
NK1-2.2	Given Name	R	uppercase or mixed case string	Joseph		
NK1-2.3	Middle and other names	RE	uppercase or mixed case string	М		

NK1-2.7	Name Type Code	RE	codes from NAACCR Volume V/HL7 table 0200: L - legal name A - Alias name D - Display name M - maiden name (nee) N - nickname B - Birth name	L		
NK1-3	Relationship	RE	code^display text for code^code system table	FTH^Father^HL70063		populate if known
NK1-3.1		R	code from NAACCR Volume V/HL7 table 0063	FTH		These codes are all listed in Volume V v4.0
NK1-3.2		R	display text for code from table 0063	Father		
NK1-3.3		R	code system is HL7 table 0063	HL70063		if component 1 (identifier) is populated, this must also be populated.
NK1-4	Address	RE	Other follow-up contact's (not the patient) address: Street address^other designation(apt#, etc)^city^state^zip code^address type	2188 Wells Dr #18^Lakeshore Apartments^Sacramento^CA^95 815^USA^M	NO	Other contact's latest known residential address
NK1-4.1	Address Line 1	R	uppercase or mixed case string; Mixed case is allowed. Embedded spaces are allowed. Special characters are limited to periods, slashes, hyphens, and pound signs.	2188 Wells Dr #18		Other contact's latest known residential street address. Include apartment/suite number at the end of the street address (rather than entering it in address line 2). Enter UNKNOWN if the address is accessible but unknown. Leave blank if address is not accessible.
NK1-4.2	Address Line 2	RE	uppercase or mixed case string	Lakeshore Apartments		Other contact'slatest known residential address supplemental information. Enter any additional information such as the name of an apartment complex or nursing facility, a building number, etc. Enter apartment numbers at the end of the

					street address field rather than here.
NK1-4.3	City	R	uppercase or mixed case string	Sacramento	Other contact's latest known residential address city. Enter UNKNOWN if the address is accessible but unknown. Leave blank if address is not accessible.
NK1-4.4	State	R	2-letter state/province abbreviation	CA	Other contact's latest known residential address state. See States and Provinces sheet for list of CCR preferred abbreviations. Send ZZ if address is accessible but unknown; Leave blank if address is inaccessible.
NK1-4.5	Zip Code	R	valid postal code, 888888888, 999999999, or blank if address is not accessible	95815	Other contact's latest known residential address postal code. Zip-5 or Zip+4 (9 characters) for US; other country's postal code; for US and Canada, if postal code is accessible but unknown, then send 99999999; for countries other than US and Canada, if postal code is accesible but unknown, then send 888888888. Send blank if address is not accessible.
NK1-4.6	Country code	RE	3 letter ISO country code uppercase	USA	Other contact's latest known residential address country when speciman was collected. Leave blank if address is not accessible.
NK1-4.7	Address Type	RE	code from NAACCR Volume V/HL7 table 0190: H - home, M - mailing, B - business, P - permanent, N - birth, BR - residence at birth, L - legal, F - country of origin, C - current or temporary	Н	Home/residential address (H) for other contact preferred; use type M for PO box addresses

Patient Vi	sit (PV1) Segment	RE			NO	
PV1-1	Set ID - PV1	R	1 (one PV1 segment required to get physicians as potential followback sources)	1	NO	
PV1-2	Patient Class	R	code from table 0004	N	NO	Required for HL7 compliance, but not applicable for registries, so use code N
PV1-7	Attending Doctor	RE	Attending/managing physician's ID number^Last name^first name^middle name^suffix^prefix^degree^^assig ning authority^name type code^^^Identifier type code	A1234567^Welby^John^M^Jr^Dr ^MD^^California^L^^^SL	NO	The attending doctor is key information for the registry to know who to contact for more clinical or epidemiological information, so please try to obtain her/his name and an ID number. Often this is not the same doctor as the ordering provider, so it is very important. For the purposes of cancer registry reporting, the attending doctor is defined as the physician who was responsible for the overall management of the patient during diagnosis and/or treatment for this cancer at the time the report was transmitted, whether diagnosis/treatment occurred in an office or a facility, inpatient or outpatient.
PV1-7.1	ID Number	R	alphanumeric string up to 15 characters in length	A1234567		The registry's preferred ID number types (in order) are 1) the doctor's personal NPI number (not her/his office/facility NPI number) or 2) her/his state license number. Local doctor numbers are of lesser use to the registry because they can't all be tracked and doctors with common names need a distinguishing ID number, but please send them if the registry's preferred ID number types are not accessible.
PV1-7.2	Family Name	R	alphanumeric string up to 24 characters in length	Welby		

PV1-7.3	Given Name	R	alphanumeric string up to 16 characters in length	John	
PV1-7.4	Second and Further Given Names or Initials Thereof	RE	alphanumeric string up to 16 characters in length	М	
PV1-7.5	Suffix (e.g., JR or III)	RE	alphabetic	Jr	
PV1-7.6	Prefix (e.g., DR)	RE	alphabetic	Dr	
PV1-7.7	Degree (e.g., MD)	RE	alphabetic	MD	
PV1-7.9	Assigning Authority	RE	composite field	California	must be populated if the ID is a local or state identifier for the doctor; do not have to populate if ID type is NPI
PV1- 7.9.1	Namespace ID	R	name of the organization, state, or facility/office that assigned the identifier in component 1	California	If the ID number in the first component is the provider's personal NPI number, just send CMS here. If the above ID number is the provider's state license number, then just send the name of the state here. Those are the preferred ID number types so please try to send one or the other. But if a local number is all that is accessible and it was generated by a specific facility/office, send the name of the facility/office. If a local number is all that is accessible and it was generated by an organization, not a specific facility/office, then please provide the organization name here.
PV1- 7.9.2	Universal ID	RE	blank or an ID number to identify the facility/office that generated the provider's ID number in the first component		If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send the facility/office's NPI number (not the provider's personal NPI number here), CLIA number, or the registry's reporting source number for the

					facility/office if provided to you. Only facilities with labs will have CLIA numbers, though.
PV1- 7.9.3	Universal ID Type	RE	Blank, NPI, CLIA, or CALIF (CA Cancer Registry-provided reporting source number) depending on provider ID type and assigning authority universal ID type		If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send NPI, CLIA, or CALIF to identify which type of facility/office ID is provided as the assigning authority's Universal ID.
PV1-7.10	Name Type Code	RE	codes from table 0200: L - legal name A - Alias name D - Display name M - maiden name (nee) N - nickname B - Birth name	L	Legal name (L) will be assumed if not sent.
PV1-7.13	Identifier Type Code	R	Code from table 0203 in Volume V v4.0 LN - license number; DN - local doctor number; NPI - National Provider ID; SL - State license number (i.e., California); MD - medical license number	SL	To allow backward compatibility and to recognize NAACCR Volume V's emphasis on using MD for medical doctor license numbers, LN, SL, and MD are all allowed to identify the ID number in the first component as a license number. SL or MD are preferred for state license numbers. If a local id number is provided instead of NPI number or a license number, use DN (local doctor number).

PV1-8	Referring Doctor	RE	Followup physician's ID number^Last name^first name^middle name^name suffix^prefix^degree^^assigning authority^name type code^^^Identifier type code	A1234567^Welby^John^M^Jr^Dr ^MD^^California^L^^^SL	NO	The doctor that referred the patient to the ordering facility/office and ordering provider may be helpful for the registry to contact to obtain more clinical or epidemiological information, so please identify her/him if she/he is known. This doctor may or may not be the same as the ordering provider and may or may not be the same as the attending doctor.
PV1-8.1	ID Number	R	alphanumeric string up to 15 characters in length	A1234567		The registry's preferred ID number types (in order) are 1) the doctor's personal NPI number (not her/his office/facility NPI number) or 2) her/his state license number. Local doctor numbers are of lesser use to the registry because they can't all be tracked and doctors with common names need a distinguishing ID number, but please send them if the registry's preferred ID number types are not accessible.
PV1-8.2	Family Name	R	alphanumeric string up to 24 characters in length	Welby		
PV1-8.3	Given Name	R	alphanumeric string up to 16 characters in length	John		
PV1-8.4	Second and Further Given Names or Initials Thereof	RE	alphanumeric string up to 16 characters in length	M		
PV1-8.5	Suffix (e.g., JR or III)	RE	alphabetic	Jr		
PV1-8.6	Prefix (e.g., DR)	RE	alphabetic	Dr		
PV1-8.7	Degree (e.g., MD)	RE	alphabetic	MD		
PV1-8.9	Assigning Authority	RE	composite field	California		must be populated if the ID is a local or state identifier for the doctor; do not have to populate if ID type is NPI

PV1- 8.9.1	Namespace ID	R	name of the organization, state, or facility/office that assigned the identifier in component 1	California	If the ID number in the first component is the provider's personal NPI number, just send CMS here. If the above ID number is the provider's state license number, then just send the name of the state here. Those are the preferred ID number types so please try to send one or the other. But if a local number is all that is accessible and it was generated by a specific facility/office, send the name of the facility/office. If a local number is all that is accessible and it was generated by an organization, not a specific facility/office, then please provide the organization name here.
PV1- 8.9.2	Universal ID	RE	blank or an ID number to identify the facility/office that generated the provider's ID number in the first component		If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send the facility/office's NPI number (not the provider's personal NPI number here), CLIA number, or the registry's reporting source number for the facility/office if provided to you. Only facilities with labs will have CLIA numbers, though.
PV1- 8.9.3	Universal ID Type	RE	Blank, NPI, CLIA, or CALIF (CA Cancer Registry-provided reporting source number) depending on provider ID type and assigning authority universal ID type		If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send NPI,

						CLIA, or CALIF to identify which type of facility/office ID is provided as the assigning authority's Universal ID.
PV1-8.10	Name Type Code	RE	codes from table 0200: L - legal name A - Alias name D - Display name M - maiden name (nee) N - nickname B - Birth name	L		Legal name (L) will be assumed if not sent.
PV1-8.13	Identifier Type Code	R	Code from table 0203 in Volume V v4.0 LN - license number; DN - local doctor number; NPI - National Provider ID; SL - State license number (i.e., California); MD - medical license number	SL		To allow backward compatibility and to recognize NAACCR Volume V's emphasis on using MD for medical doctor license numbers, LN, SL, and MD are all allowed to identify the ID number in the first component as a license number. SL or MD are preferred for state license numbers. If a local id number is provided instead of NPI number or a license number, use DN (local doctor number).
PV1-9	Consulting Doctor	RE	Consulting physician's ID number^Last name^first name^middle name^name suffix^prefix^degree^^assigning authority^name type code^^^ldentifier type code	A1234567^Welby^John^M^Jr^Dr ^MD^^California^L^^^SL	NO	If a consulting doctor has been involved in the patient's case, she may be helpful for the registry to contact to obtain more clinical or epidemiological information, so please identify her/him if she/he is known. This doctor would be different than the ordering provider, attending doctor, and referring doctor.

PV1-9.1	ID Number	R	alphanumeric string up to 15 characters in length	A1234567	The registry's preferred ID number types (in order) are 1) the doctor's personal NPI number (not her/his office/facility NPI number) or 2) her/his state license number. Local doctor numbers are of lesser use to the registry because they can't all be tracked and doctors with common names need a distinguishing ID number, but please send them if the registry's preferred ID number types are not accessible.
PV1-9.2	Family Name	R	alphanumeric string up to 24 characters in length	Welby	
PV1-9.3	Given Name	R	alphanumeric string up to 16 characters in length	John	
PV1-9.4	Second and Further Given Names or Initials Thereof	RE	alphanumeric string up to 16 characters in length	М	
PV1-9.5	Suffix (e.g., JR or III)	RE	alphabetic	Jr	
PV1-9.6	Prefix (e.g., DR)	RE	alphabetic	Dr	
PV1-9.7	Degree (e.g., MD)	RE	alphabetic	MD	
PV1-9.9	Assigning Authority	RE	composite field	California	must be populated if the ID is a local or state identifier for the doctor; do not have to populate if ID type is NPI
PV1- 9.9.1	Namespace ID	R	name of the organization, state, or facility/office that assigned the identifier in component 1	California	If the ID number in the first component is the provider's personal NPI number, just send CMS here. If the above ID number is the provider's state license number, then just send the name of the state here. Those are the preferred ID number types so please try to send one or the other. But if a local number is all that is accessible and it was generated by a specific facility/office, send the name of the facility/office. If a local number is all that is accessible and it was generated by an organization, not a

				specific facility/office, then please provide the organization name here.
PV1- 9.9.2	Universal ID	RE	blank or an ID number to identify the facility/office that generated the provider's ID number in the first component	If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send the facility/office's NPI number (not the provider's personal NPI number here), CLIA number, or the registry's reporting source number for the facility/office if provided to you. Only facilities with labs will have CLIA numbers, though.
PV1- 9.9.3	Universal ID Type	RE	Blank, NPI, CLIA, or CALIF (CA Cancer Registry-provided reporting source number) depending on provider ID type and assigning authority universal ID type	If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send NPI, CLIA, or CALIF to identify which type of facility/office ID is provided as the assigning authority's Universal ID.

PV1-9.10	Name Type Code	RE	codes from table 0200: L - legal name A - Alias name D - Display name M - maiden name (nee) N - nickname B - Birth name	L		Legal name (L) will be assumed if not sent.
PV1-9.13	Identifier Type Code	R	Code from table 0203 in Volume V v4.0 LN - license number; DN - local doctor number; NPI - National Provider ID; SL - State license number (i.e., California); MD - medical license number	SL		To allow backward compatibility and to recognize NAACCR Volume V's emphasis on using MD for medical doctor license numbers, LN, SL, and MD are all allowed to identify the ID number in the first component as a license number. SL or MD are preferred for state license numbers. If a local id number is provided instead of NPI number or a license number, use DN (local doctor number).
PV1-17	Admitting Doctor	RE	Admitting physician's ID number^Last name^first name^middle name^name suffix^prefix^degree^^assigning authority^name type code^^^Identifier type code	1234567890^Welby^John^M^Jr^ Dr^MD^^CMS^L^^^NPI	NO	If a consulting doctor has been involved in the patient's case, she may be helpful for the registry to contact to obtain more clinical or epidemiological information, so please identify her/him if she/he is known. This doctor would be different than the ordering provider, attending doctor, and referring doctor.
PV1-17.1	ID Number	R	alphanumeric string up to 15 characters in length	1234567890		The registry's preferred ID number types (in order) are 1) the doctor's personal NPI number (not her/his office/facility NPI number) or 2) her/his state license number. Local doctor numbers are of lesser use to the registry because they can't all be tracked and doctors with common names need a distinguishing ID number, but please send them if the registry's preferred ID number types are not accessible.

PV1-17.2	Family Name	R	alphanumeric string up to 24 characters in length	Welby	
PV1-17.3	Given Name	R	alphanumeric string up to 16 characters in length	John	
PV1-17.4	Second and Further Given Names or Initials Thereof	RE	alphanumeric string up to 16 characters in length	М	
PV1-17.5	Suffix (e.g., JR or III)	RE	alphabetic	Jr	
PV1-17.6	Prefix (e.g., DR)	RE	alphabetic	Dr	
PV1-17.7	Degree (e.g., MD)	RE	alphabetic	MD	
PV1-17.9	Assigning Authority	RE	composite field	CMS	must be populated if the ID is a local or state identifier for the doctor; do not have to populate if ID type is NPI
PV1- 17.9.1	Namespace ID	R	name of the organization, state, or facility/office that assigned the identifier in component 1	CMS	If the ID number in the first component is the provider's personal NPI number, just send CMS here. If the above ID number is the provider's state license number, then just send the name of the state here. Those are the preferred ID number types so please try to send one or the other. But if a local number is all that is accessible and it was generated by a specific facility/office, send the name of the facility/office. If a local number is all that is accessible and it was generated by an organization, not a specific facility/office, then please provide the organization name here.
PV1- 17.9.2	Universal ID	RE	blank or an ID number to identify the facility/office that generated the provider's ID number in the first component		If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send the facility/office's NPI number (not the

					provider's personal NPI number here), CLIA number, or the registry's reporting source number for the facility/office if provided to you. Only facilities with labs will have CLIA numbers, though.
PV1- 17.9.3	Universal ID Type	RE	Blank, NPI, CLIA, or CALIF (CA Cancer Registry-provided reporting source number) depending on provider ID type and assigning authority universal ID type		If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send NPI, CLIA, or CALIF to identify which type of facility/office ID is provided as the assigning authority's Universal ID.
PV1- 17.10	Name Type Code	RE	codes from table 0200: L - legal name A - Alias name D - Display name M - maiden name (nee) N - nickname B - Birth name	L	Legal name (L) will be assumed if not sent.
PV1- 17.13	Identifier Type Code	R	Code from table 0203 in Volume V v4.0 LN - license number; DN - local doctor number; NPI - National Provider ID; SL - State license number (i.e., California); MD - medical license number	NPI	To allow backward compatibility and to recognize NAACCR Volume V's emphasis on using MD for medical doctor license numbers, LN, SL, and MD are all allowed to identify the ID number in the first component as a license number. SL or MD are preferred for state license numbers. If a local id number is provided instead of NPI number or a license number, use DN (local doctor number).

Common (Order (ORC) Segment	R			NO	
ORC-1	Order Control	R				
ORC-21	Ordering Facility Name	R	Organization Name^Organization Name Type Code^^^^Identifier Type Code^^^Organization Identifier	NSM^A^^^^CALIF^^^00004910 64	NO	This field indicates the medical facility or office where the original specimen was obtained and where the path study was ordered (where the patient was seen by the ordering provider). Examples include inpatient facilities, outpatient surgical facilities, and medical clinics/offices. Knowledge of the ordering facility/office allows public health officials to follow up on positive tests to obtain further clinical and epidemiological information.
ORC-21.1	Organization Name	R	alphanumeric string up to 24 characters in length	NSM		
ORC-21.2	Organization Name Type Code	RE	L - legal name; D - display name; A - alias name; SL - stock exchange listing name	А		must populate if not the legal name of the organization
ORC-21.6	Assigning Authority	RE	composite field containing the name and/or ID of the organization that assigned the identifier	California		
ORC- 21.6.1	Namespace ID	R	name of the organization that assigned the facility/office identifier in component 10	California		If the ID number in the 10th component is the ordering facility/office's NPI number, just send CMS here. If the ID number is the CA Cancer Registry's reporting source number for the facility/office, then just send California here. If some other organization generated the ID number, you can send the organization's name to identify it, but the registry prefers the facility/office's NPI number or its own reporting source number.

ORC- 21.6.2	Universal ID	RE	blank			The assigning authority name and the identifier type code are sufficient, so blank is fine here.
ORC- 21.6.3	Universal ID Type	RE	blank			The assigning authority name and the identifier type code are sufficient, so blank is fine here.
ORC-21.7	Identifier Type Code	R	Code from table 0203 in Volume V v4.0 (+ CALIF). NPI - NPI number; CALIF - CA Cancer Registry-issued reporting source number; CLIA - CLIA number; DUNS - Dun & Bradstreet number; EN - Federal Employer ID number; TAX - Federal Tax ID number; SR - State registry ID	CALIF		-
ORC- 21.10	Organization Identifier	R	alphanumeric identifier of the organization	0000491064		The registry generates its own CALIF reporting source numbers for all reporting facilities and offices, which can be shared with senders, and it tracks NPI numbers for all facilities and offices, so they are the preferred facility/office identifier types. If NPI number is used, please make sure it is the main NPI number for the facility/office (can be multiple) and not a personal NPI provider number. The registry doesn't track AHA numbers and offices won't have them.
ORC-22	Ordering Facility Address	R	Street address^other designation^city^state^zip code^Country Code^Address Type^^County/Parish Code	123 Main Street #200^Canary Building^Sacramento^CA^95815 ^USA^B^^CA067	NO	
ORC-22.1	Street Address	R	uppercase or mixed case string	123 Main Street #200		Street Address including suite number

ORC-22.2	Other Designation	RE	uppercase or mixed case string	Canary Building		Building name/number, department name, etc.
ORC-22.3	City	R	uppercase or mixed case string	Sacramento		
ORC-22.4	State	R	2-letter state/province abbreviation	CA		See States and Provinces sheet for list of CCR preferred abbreviations
ORC-22.5	Zip Code	R	valid postal code	95815		Zip-5 or Zip+4 (9 characters) for US; other country's postal code; address is required so can't be unknown or blank
ORC-22.6	Country code	RE	3 letter ISO country code uppercase	USA		
ORC-22.7	Address Type	RE	code from table 0190: H - home, M - mailing, B - business, P - permanent, L - legal, C - current or temporary	В		Physical addresses of facilities are considered Firm/Business type addresses
ORC-22.9	County/Parish Code	RE	FIPS code with state abbreviation prefix. (i.e., CA067 = California, Sacramento County)	CA067		According to FIPS guidance, include the 2-letter state code (e.g., CA067 = California, Sacramento County). A look-up tool can be found at https://www.census.gov/geo/referen ce/codes/cou.html. California, county unknown or other USA state = CA000; Non-USA = CA998; and Unknown, but not California = CA999
ORC-23	Ordering Facility Phone Number	RE	Ordering Facility Phone Number	^PRN^PH^jsmith@gmail.com^1^ 916^9999999^^	NO	must populate with a voice phone for the facility
ORC-23.2	Telecommunication Use Code	RE	code from table 0201: PRN - Primary Residence Number, ORN - Other residence number, WPN - work number, EMR - emergency number, VHN - vacation home number, ASN - answering service number, BPN - beeper number, NET - email address only	PRN		

ORC-23.3	Telecommunication Equipment Type	RE	code from table 0202: PH - voice telephone, FX - fax, MD - modem, CP - cell phone, BP - beeper, TDD - tone device for the deaf, X.400 and "Internet" for DNS and network addresses only	PH		generally only use codes PH and CP.
ORC-23.4	Email Address	RE	email address	jsmith@gmail.com		
ORC-23.5	Country Code	RE	1 is the code for US numbers	1		
ORC-23.6	Area/City Code	RE	3 digits in the US	916		
ORC-23.7	Local Number	RE	4 digits in the US	9999999		
ORC-23.8	Extension	RE	generally no more than 7 digits			
Observation	on Request (OBR) Segment	R	NAACCR Volume V v4.0 format		Yes	Typically, an anatomical pathology report is associated with a surgical specimen and results in a single message or transmission. In a single transmission, one MSH segment, one ORC segment, and one OBR segment will be required. For cancer registry reporting there could be multiple OBR segments for a single MSH segment if the text-based pathology report describes each of the multiple primaries in separate sections. In such a circumstance, it is recommended that there be a single OBR for each of the primary cancers being reported. Another example of using a single MSH segment and multiple OBR segments would be transmitting an encoded checklist and raw text plus a synoptic report with all data encoded. See NAACCR Volume V for more information on use of multiple OBR segments.
OBR-1	Set ID – OBR	R	OBR segment sequence number	1		

OBR-2	Placer Order Number	RE	Order number^ordering facility name^ordering facility ID number^ordering facility ID number type	1234567^NSM^0000491064^CAL IF	This field identifies an order/requisition uniquely among all orders from a particular facility/office. Assigned by the placer. NPI number or CALIF number preferred to identify the ordering facility/office.
OBR-2.1	Order number	R	suggested max of 15 characters, but could be more or less	1234567	, , , , , , , , , , , , , , , , , , ,
OBR-2.2	Ordering facility/office name	R	Application name or abbreviation of ordering system/facility/office	NSM	
OBR-2.3	Ordering facility/office ID number	R	NPI or CALIF number identifying original ordering facility/office preferred	0000491064	
OBR-2.4	Ordering facility/office ID number type	R	Code from table 0203 in Volume V v4.0 (+ CALIF). NPI - NPI number; CALIF - California issued ID number); CLIA - CLIA number; DUNS - Dun & Bradstreet number; EN - Federal Employer ID number; TAX - Federal Tax ID number; SR - State registry ID	CALIF	
OBR-3	Filler Order Number	R	Accession or Path Report Number^facility name^facility identifier^facility identifier type (CLIA, CALIF, or NPI)	12345678^NKHCL^05D0668051^ CLIA	in general, the facility identifier is usually a CLIA number as the path report number or accession number is almost always assigned by the laboratory
OBR-3.1	Entity Identifier	R	Accession number when from labs, or Path Report Number	12345678	
OBR-3.2	Namespace ID	R	name of organization or facility that assigned the identifier	NKHCL	

OBR-3.3	Universal ID	R	unversal identifier of organization or facility that assigned the identifier	05D0668051		the facility identifier is usually a CLIA number as the path report number or accession number is almost always assigned by the laboratory
OBR-3.4	Universal ID Type	R	code for type of identifier drawn from HL7 table 0301 (may be a CLIA, NPI, or California-issued ID (CALIF))	CLIA		
OBR-4	Universal Service ID	R	See NAACCR Volume V, OBR-4 description.	11529-5^SURGICAL PATH REPORT^LN^1000^PATHOLOGY REPORT^L 60568-3^SYNOPTIC REPORT^LN^1000^PATHOLOGY		
				REPORT^L		
OBR-4.1	Identifier	R	LOINC code for the report type	60568-3		
OBR-4.2	Text	R	LOINC name for the report type	SYNOPTIC REPORT		
OBR-4.3	Name of Coding System	R	"LN" indicating it is a LOINC code	LN		must be drawn from HL7 table 0396
OBR-4.4	Alternate Identifier	RE	local code for the report type	1000		
OBR-4.5	Alternate Text	RE	local name for the report type	PATHOLOGY REPORT		
OBR-4.6	Name of Alternate Coding System	RE	"L" indicating it is a local code	L		must be drawn from HL7 table 0396
OBR-7	Observation Date/Time	R	Date of specimen collection: YYYYMMDD	20070223		
OBR-10	Collector Identifier	RE	Surgeon or other collector's ID number^Last name^first name^middle name^suffix^prefix^degree^^assig ning authority^name type code^^^Identifier type code	A1234567^Welby^John^M^Jr^Dr ^MD^^California^L^^^SL	NO	The collecting surgeon may be helpful for the registry to contact to obtain more clinical or epidemiological information, so please identify her/him if she/he is known. This doctor could be the same or different as the ordering provider and other doctors sent.

OBR-10.1	ID Number	R	alphanumeric string up to 15 characters in length	A1234567	ty p o h d tr n n	he registry's preferred ID number ypes (in order) are 1) the doctor's ersonal NPI number (not her/his ffice/facility NPI number) or 2) er/his state license number. Local octor numbers are of lesser use to ne registry because they can't all be racked and doctors with common ames need a distinguishing ID umber, but please send them if the egistry's preferred ID number types re not accessible.
OBR-10.2	Family Name	R	alphanumeric string up to 24 characters in length	Welby		
OBR-10.3	Given Name	R	alphanumeric string up to 16 characters in length	John		
OBR-10.4	Second and Further Given Names or Initials Thereof	RE	alphanumeric string up to 16 characters in length	М		
OBR-10.5	Suffix (e.g., JR or III)	RE	alphabetic	Jr		
OBR-10.6	Prefix (e.g., DR)	RE	alphabetic	Dr		
OBR-10.7	Degree (e.g., MD)	RE	alphabetic	MD	-	
OBR-10.9	Assigning Authority	RE	composite field	California	Ð	nust be populated if the ID is a local r state identifier for the doctor; do ot have to populate if ID type is NPI
OBR- 10.9.1	Namespace ID	R	name of the organization, state, or facility/office that assigned the identifier in component 1	California	co N tl si tl a p B a s o is	the ID number in the first omponent is the provider's personal IPI number, just send CMS here. If ne above ID number is the provider's tate license number, then just send he name of the state here. Those re the preferred ID number types so lease try to send one or the other. ut if a local number is all that is ccessible and it was generated by a pecific facility/office, send the name of the facility/office. If a local number is all that is accessible and it was generated by an organization, not a

				specific facility/office, then please provide the organization name here.
OBR- 10.9.2	Universal ID	RE	blank or an ID number to identify the facility/office that generated the provider's ID number in the first component	If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send the facility/office's NPI number (not the provider's personal NPI number here), CLIA number, or the registry's reporting source number for the facility/office if provided to you. Only facilities with labs will have CLIA numbers, though.
OBR- 10.9.3	Universal ID Type	RE	Blank, NPI, CLIA, or CALIF (CA Cancer Registry-provided reporting source number) depending on provider ID type and assigning authority universal ID type	If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send NPI, CLIA, or CALIF to identify which type of facility/office ID is provided as the assigning authority's Universal ID.

OBR- 10.10	Name Type Code	RE	codes from table 0200: L - legal name A - Alias name D - Display name M - maiden name (nee) N - nickname B - Birth name	L		Legal name (L) will be assumed if not sent.
OBR- 10.13	Identifier Type Code	R	Code from table 0203 in Volume V v4.0 LN - license number; DN - local doctor number; NPI - National Provider ID; SL - State license number (i.e., California); MD - medical license number	SL		To allow backward compatibility and to recognize NAACCR Volume V's emphasis on using MD for medical doctor license numbers, LN, SL, and MD are all allowed to identify the ID number in the first component as a license number. SL or MD are preferred for state license numbers. If a local id number is provided instead of NPI number or a license number, use DN (local doctor number).
OBR-14	Specimen received date/time	R	Date of report: YYYYMMDDD (9999999 when not available)	20140622	NO	
OBR-15	Specimen Source	RE	not used for synoptic reporting using CAP eCC		NO	
OBR-16	Ordering Provider	R	Ordering provider's ID number^last name^first name^middle name^name suffix^name prefix^degree^^assigning authority^name type code^^^Identifier type code	1234567890^Welby^John^M^Jr^ Dr^MD^^CMS^L^^^NPI	NO	The ordering provider is critical to the registry to contact to obtain more clinical or epidemiological information, so please identify her/him if she/he is known. This doctor could be the same or different as the attending doctor or surgeon sent.
OBR-16.1	ID Number	R	alphanumeric string up to 15 characters in length	1234567890		The registry's preferred ID number types (in order) are 1) the doctor's personal NPI number (not her/his office/facility NPI number) or 2) her/his state license number. Local doctor numbers are of lesser use to the registry because they can't all be tracked and doctors with common

						names need a distinguishing ID number, but please send them if the registry's preferred ID number types are not accessible.
OBR-16.2	Family Name	R	alphanumeric string up to 24 characters in length	Welby		
OBR-16.3	Given Name	R	alphanumeric string up to 16 characters in length	John		
OBR-16.4	Second and Further Given Names or Initials Thereof	RE	alphanumeric string up to 16 characters in length	M		
OBR-16.5	Suffix (e.g., JR or III)	RE	alphabetic	Jr		
OBR-16.6	Prefix (e.g., DR)	RE	alphabetic	Dr		
OBR-16.7	Degree (e.g., MD)	RE	alphabetic	MD	_	
OBR-16.9	Assigning Authority	RE	composite field	CMS		must be populated if the ID is a local or state identifier for the doctor; do not have to populate if ID type is NPI
OBR- 16.9.1	Namespace ID	R	name of the organization, state, or facility/office that assigned the identifier in component 1	CMS	-	If the ID number in the first component is the provider's personal NPI number, just send CMS here. If the above ID number is the provider's state license number, then just send the name of the state here. Those are the preferred ID number types so please try to send one or the other. But if a local number is all that is accessible and it was generated by a specific facility/office, send the name of the facility/office. If a local number is all that is accessible and it was generated by an organization, not a specific facility/office, then please provide the organization name here.

OBR- 16.9.2	Universal ID	RE	blank or an ID number to identify the facility/office that generated the provider's ID number in the first component		If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send the facility/office's NPI number (not the provider's personal NPI number here), CLIA number, or the registry's reporting source number for the facility/office if provided to you. Only facilities with labs will have CLIA numbers, though.
OBR- 16.9.3	Universal ID Type	RE	Blank, NPI, CLIA, or CALIF (CA Cancer Registry-provided reporting source number) depending on provider ID type and assigning authority universal ID type		If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send NPI, CLIA, or CALIF to identify which type of facility/office ID is provided as the assigning authority's Universal ID.
OBR- 16.10	Name Type Code	RE	codes from table 0200: L - legal name A - Alias name D - Display name M - maiden name (nee) N - nickname B - Birth name	L	Legal name (L) will be assumed if not sent.

OBR- 16.13	Identifier Type Code	R	Code from table 0203 in Volume V v4.0 LN - license number; DN - local doctor number; NPI - National Provider ID; SL - State license number (i.e., California); MD - medical license number	NPI		To allow backward compatibility and to recognize NAACCR Volume V's emphasis on using MD for medical doctor license numbers, LN, SL, and MD are all allowed to identify the ID number in the first component as a license number. SL or MD are preferred for state license numbers. If a local id number is provided instead of NPI number or a license number, use DN (local doctor number).
OBR-17	Order Callback Phone Number	RE	Ordering Physician's Phone Number	^WPN^PH^jsmith@gmail.com^1 ^916^9999999	YES/3 maximu m	
OBR-17.2	Telecommunication Use Code	RE	code from table 0201: PRN - Primary Residence Number, ORN - Other residence number, WPN - work number, EMR - emergency number, VHN - vacation home number, ASN - answering service number, BPN - beeper number, NET - email address only	WPN		
OBR-17.3	Telecommunication Equipment Type	RE	code from table 0202: PH - voice telephone, FX - fax, MD - modem, CP - cell phone, BP - beeper, TDD - tone device for the deaf, X.400 and "Internet" for DNS and network addresses only	PH		generally only use codes PH and CP.
OBR-17.4	Email Address	RE	email address	jsmith@gmail.com		
OBR-17.5	Country code	RE	1 is the code for US numbers	1		
OBR-17.6	Area/City Code	RE	3 digits in the US	415		
OBR-17.7	Local Number	RE	4 digits in the US	7659876		

OBR-22	Results Rpt/Status Change Date/Time	R	Date of report: YYYYMMDDD (99999999 when not available)	20140622	NO	should always be available
OBR-25	Result Status	R	F=Final; C=Correction	F	NO	These are the only two status codes used in cancer registry reporting
OBR-32	Principal Result Interpreter	R	Pathologist's ID number&last name&first name&middle name&name suffix&name prefix°ree&&assigning authority	1234567890&Welby&John&M&J r&Dr&MD&&CMS		The primary pathologist is not the registry's first choice to contact for more information about the patient beyond what can be captured in a a pathology report, but in the absence of other good options, it may be necessary to contact her/him to attempt to find an attending doctor or another source. And the primary pathologist should always be know by the lab providing the report, so sending her/his information is required. The NAACCR Volume V formatting instructions are different than those for all the other doctor/provider fields, and the examples don't matched the formatting, but we tried to make ours more similar than different to the other fields and match the formatting rewquirements. No provider ID number type is included here (NPI, DN, etc.) but it can be inferred from the assigning authority
OBR-32.1	Name	R	composite name and ID number field			
OBR- 32.1.1	ID Number	R	alphanumeric string up to 15 characters in length	1234567890		The registry's preferred ID number types (in order) are 1) the doctor's personal NPI number (not her/his office/facility NPI number) or 2) her/his state license number. Local doctor numbers are of lesser use to the registry because they can't all be tracked and doctors with common names need a distinguishing ID number, but please send them if the

						registry's preferred ID number types are not accessible.
OBR- 32.1.2	Family Name	R	alphanumeric string up to 24 characters in length	Welby		
OBR- 32.1.3	Given Name	R	alphanumeric string up to 16 characters in length	John		
OBR- 32.1.4	Second and Further Given Names or Initials Thereof	RE	alphanumeric string up to 16 characters in length	M		
OBR- 32.1.5	Suffix (e.g., JR or III)	RE	alphabetic	Jr		
OBR- 32.1.6	Prefix (e.g., DR)	RE	alphabetic	Dr		
OBR- 32.1.7	Degree (e.g., MD	RE	alphabetic	MD		
OBR- 32.1.9	Assigning Authority - Namespace ID	R	name of the organization, state, or facility/office that assigned the identifier in component 1	CMS	-	If the ID number in the first component is the provider's personal NPI number, just send CMS here. If the above ID number is the provider's state license number, then just send the name of the state here. Those are the preferred ID number types so please try to send one or the other. But if a local number is all that is accessible and it was generated by a specific facility/office, send the name of the facility/office. If a local number is all that is accessible and it was generated by an organization, not a specific facility/office, then please provide the organization name here.

OBR- 32.1.10	Assigning Authority - Universal ID	RE	blank or an ID number to identify the facility/office that generated the provider's ID number in the first component			If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send the facility/office's NPI number (not the provider's personal NPI number here), CLIA number, or the registry's reporting source number for the facility/office if provided to you. Only facilities with labs will have CLIA numbers, though.
OBR- 32.1.11	Assigning Authority - Universal ID Type	RE	Blank, NPI, CLIA, or CALIF (CA Cancer Registry-provided reporting source number) depending on provider ID type and assigning authority universal ID type			If the ID number in the first component is the provider's personal NPI number, a state license number, or an organization's local number that does not represent a specific facility/office, just leave this field blank. But if a local number is all that is accessible and it was generated by a specific facility/office, send NPI, CLIA, or CALIF to identify which type of facility/office ID is provided as the assigning authority's Universal ID.
Narrativ	ntion/Results (OBX) - ye/Segments Synoptic of 2 OBX Segment Stuctures submission, see notes)	R			YES	Facility Groups and Labs will use the following OBX segment structure if they are submitting narrative or synoptically structured reports as defined within NAACCR Volume V
OBX-1	Set ID – OBX	R	Sequential number of OBX within OBR block (1,2,3, etc)	1	NO	

OBX-2	Value Type	R	NAACCR Volume V Specification:	CWE	NO		l
			Please see comment for the codes				l
			CE=Coded Entry				l
			CWE=Coded With Exception				l
			DT=Date				
			ED=Encapsulated Data				
			FT=Formatted Text (Display)				
			NM=Numeric				
			RP=Reference Pointer				
			SN=Structured Numeric				
			ST=String Data				
			TX=Text Data (Display)				l
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OBX-3	Observation Identifier	R	Observation ID^Observation ID text^Observation ID coding system LOINC codes used to identify components of narrative path report: PathFinal Diagnosis 22637-3 PathText Diagnosis 33746-9 PathClinical History 22636-5 PathNature of Specimen 22633-2 PathGross Pathology 22634-0 PathMicro Pathology 22635-7 PathComment Section 22638-1 PathSuppl Reports 22639-9 PathStaging 22640-7 LOINC codes for specific tests (e.g.) Cell Marker studies 18718-7 Urinalysis studies 18729-4 Bone Marrow Biopsy Report 33721-2 LOINC codes for NAACCR items that had been coded by abstractors (from CNET's CAS system) Primary Site 21855-2 Histologic Type 21856-0 Behavior Code 21857-8 Grade 21856-6 Laterality 20228-3 Reporting Hospital 21865-1 Accession Number - hosp 21866-9 Sequence number - hosp. 21867-7 Abstracted by 21865-5 Date of Diagnosis 21854-5	22637-3^Path report final diagnosis^LN	NO	
OBX-3.1	ObservationIdID	R	LOINC code	22637-3		
OBX-3.2	ObservationIdText	R	LOINC name	Path report final diagnosis		
OBX-3.3	ObservationIDCodingSyste m	R	LOINC coding system	LN		

OBX-4	Observation Sub-ID	RE	Numeric value used to distinguish or group related OBX segments	1	NO	Used to distinguish between multiple OBX segments organized under one OBR or group related components in reports such as surgical pathology. See NAACCR Volume V.
OBX-5	Observation Value	R	observation/results of test identified in OBX-3	text only: Malignant lymphoma, small B-cell type with plasmacytic differentiation and crystal-storing histiocytosis coded: C11.3^Anterior wall of nasopharynx^ICDO3 OR M-98613^Acute myeloid leukemia NOS^ICDO3	NO	
OBX-6	Units of Measure	RE	used for filled in numeric values that are a measurement	cm^centiMeter^UCUM	NO	
OBX-6.1	Identifier	R	label or mnemonic for the unit of measure	cm		
OBX-6.2	Text	R	display name for the unit if measure	centimeter		
OBX-6.3	Name of Coding System	R	Volume V v4.0 eCC reports must use UCUM; other lab reports may use ISO+ or ANSI+	UCUM		
OBX-11	Observation Result Status	R	F=Final; C=Correction	F	NO	F and C are the only status codes used in cancer registry reporting
OBX-15	Producer's Reference	RE	name and ID of the laboratory that actually produced the data in the report	05D0599859^NQML^CLIA		
OBX-15.1	Identifier	R	ID number of the laboratory	05D0599859		expected to be the CLIA number of the lab
OBX-15.2	Text	R	name of the laboratory	NQML		
OBX-15.3	Name of Coding System	R	CLIA, CALIF, or NPI	CLIA		

Segment (Identify 1	tion/Results (OBX) ts - Synoptic - eCC t of 2 OBX Segment Stuctures ubmission, see notes)	R			YES	Facility Groups and Labs will use the following OBX segment structure if they are submitting synoptically structured reports using CAP eCC as defined within NAACCR Volume V
OBX-1	Set ID – OBX	R	Sequential number of OBX within OBR block (1,2,3, etc)	1	NO	
OBX-2	Value Type	R	NAACCR Volume V Specification: Please see comment for the codes	CWE	NO	CAP synoptic eCC checklists only use value types CWE, NM, and ST
OBX-3	Observation Identifier	R	ckey value^ckey text^CAPECC	16209.1000043^Primary Tumor Site (Note A)^CAPECC	NO	missing format
OBX-3.1	Identifier	R	cKey value	16209.1000043		
OBX-3.2	Text	R	ckey text	Primary Tumor Site (Note A)		
OBX-3.3	Name of coding system	R	"CAPECC" for all cKeys	CAPECC		
OBX-4	Observation Sub-ID	RE	Specimen ID to which the observation applies (1, 2, 3etc), or the linkage field for multi-part answers to checklist questions	1861	NO	
OBX-5	Observation Value	R	Results of test identified in OBX-3 (Identifier^Text^Name of Coding System^Alternate Identifier^Alternate Text^Name of Alternate Coding System)	17263.1000043^Right (ascending) colon^CAPECC	NO	Note that this may be of different formats depending upon the value type in OBX-2; the CAP checklist synoptic cKey formats are only CWE, ST, and NM
OBX-5 NM	numeric value	R	numeric value	2		
OBX-5 ST	text (fill-in field) value	R	text (fill-in field) value	malformed structure		
OBX-5.1 CWE	Identifier		cKey value	17263.1000043		
OBX-5.2 CWE	Text		cKey text	Right (ascending) colon		

OBX-5.3 CWE	Name of Coding System		"CAPECC" for all cKeys	CAPECC		
OBX-5.4 CWE	Alternate Identifier	RE	other code from code maps	51342009		
OBX-5.5 CWE	Atlernate Text	RE	other text	Right colon structure (body structure)		these might be populated as SNOMED CT codes
OBX-5.6 CWE	Name of Alternate Coding System	RE	table 396 value, may be SCT for SNOMED CT or ICDO3 for ICD-O-3	SCT		
OBX-6	Units of Measure	RE	used for filled in numeric values that are a measurement	cm^centiMeter^UCUM	NO	
OBX-6.1	Identifier	R	label or mnemonic for the unit of measure	cm		
OBX-6.2	Text	R	display name for the unit if measure	centiMeter		
OBX-6.3	Name of Coding System	R	Volume V v4.0 eCC reports must use UCUM; other lab reports may use ISO+ or ANSI+	UCUM		
OBX-11	Observation Result Status	R	See comment for codes	F	NO	F and C are the only status codes used in cancer registry reporting
OBX-15	Producer's Reference	RE	name and ID of the laboratory that actually produced the data in the report	05D0599859^NQML^CLIA		
OBX-15.1	Identifier	R	ID number of the laboratory	05D0599859		expected to be the CLIA number of the lab
OBX-15.2	Text	R	name of the laboratory	NQML		
OBX-15.3	Name of Coding System	R	CLIA, CALIF, or NPI	CLIA		

6.5 Data Format

Laboratory-based cancer reports are to be formatted in accordance with federal standards for data format as defined by the NAACCR and the Office of the National Coordinator for Health Information Technology (ONC HIT). NAACCR publishes a version of the HL7 2.5.1 standard protocol which is named the Standards for Cancer Registries Volume V - Pathology Laboratory Electronic Reporting Version 4.0. There are three specific defined formats for reporting within NAACCR Volume V. CCR also supports XML data transmission via the ONC HIT standard for SDC using CAP eCC.

6.6 Supported Report Format Styles using HL7

CCR is limiting the format of path reports to three options via HL7 outlined in NAACCR Volume 5.

- Link to NAACCR Volume 5: https://www.naaccr.org/pathology-laboratory-electronic-reporting/
- Link to CA constraints: http://www.ccrcal.org/pdf/AB2325/CA_Volume_V_constraints.xlsx

6.6.1 Narrative Report

Cancer pathology reports in a text-based or narrative-style format with specific information contained in the narrative. These reports are generally dictated by a pathologist and then transcribed by a transcriptionist. Please reference NAACCR Volume 5 Appendix D: 7.1 for example:

https://www.naaccr.org/pathology-laboratory-electronic-reporting/

6.6.2 Synoptically Structured Report

Narrative cancer pathology reports that are formally divided into explicit items covering specific observations on a specimen, and laid out in a predefined format. Please reference NAACCR Volume 5 Appendix D: 7.2: https://www.naaccr.org/pathology-laboratory-electronic-reporting/

6.6.3 Synoptic Structured Report Using the CAP eCC

Cancer pathology reports that are structured synoptically and the data is also fully encoded, captured, and stored in the AP/LIS or synoptic reporting application as discrete question-and answer pairs. Please reference NAACCR Volume 5 Appendix D: 7.3: https://www.naaccr.org/pathology-laboratory-electronic-reporting/

6.6.4 SDC Technical Framework using CAP ECC

CCR supports the IHE Quality, Research, and Public Health Technical Framework Supplement SDC Rev. 2.1 Implementation as a role of 'Form receiver' for ITI-35 Transactions. Link to SDC Technical Framework Implementation Guide:

https://ihe.net/uploadedFiles/Documents/QRPH/IHE_QRPH_Suppl_SD C.pdf

Upon successful registration selecting IHE SDC as a method of reporting a service interface implementation guide will be provided.

6.7 Supported Transmission Methods

CCR supports the following data transmission methods for pathology lab electronic reporting. After a provider or pathology lab registers with CCR to send pathology data electronically to the state, CCR will work in priority order to establish appropriate connections for data submission.

6.7.1 Web Services -RESTful

RESTful web service interface for submitting for pathology laboratory electronic reports. Upon successful registration, the RESTful technical interface guide will be provided.

6.7.2 Web Services – Simple Object Access Protocol (SOAP)

SOAP 1.2 web service interface for submitting for pathology laboratory electronic reports. Upon successful registration, the SOAP 1.2 web service interface implementation guide will be provided.

6.7.3 SFTP

SSH File Transfer Protocol SFTP for uploading pathology laboratory electronic reports. Upon successful registration, the SFTP login information will be provided.

6.7.4 MLLP

MLLP for submitting pathology laboratory electronic reports. Upon successful registration, the MLLP implementation guide will be provided.

6.8 Direct Data Entry Web Portal

A Direct Data Entry Web Portal will be provided for pathologists who do not have the ability to output and send an electronic message to CCR. The Direct Data Entry Web Portal will have functionality to support direct entry of required and required if accessible data fields. The Direct Data Entry Web Portal will also have functionality associated with cut and paste of narrative text to support the direct entry data fields. The Direct Data Entry Web Portal will be deployed to serve as the low cost option for pathologists to meet the California cancer pathology reporting requirement without having to invest in software and technology. The Direct Data Entry Web Portal will require manual input of data fields and additional case information and may not be the most efficient solution for pathologists and pathology labs who receive orders to examine a moderate to high level of specimens which may result in an incidence of cancer and need to be reported to CCR.

Pathologists desiring to utilize this method for reporting will need to first establish their intent to report via the Direct Data Entry Web Portal by

registering their provider information with CCR on the California Pathology Registration Portal. CCR will be using the registration list to subsequently work with providers to establish an account on the Direct Data Entry Web Portal. The Direct Data Entry Web Portal will be a secured website conforming to state level security requirements for the data entry and output of confidential patient information to CCR. A user name and password will be issued to each user and the password will be required to be changed upon first use. A second form of authentication will be required and will consist of a code sent to the user, either by cell phone or email, which the user must then enter in the web page. Once authenticated, an upload page will be available to send pathology data to CCR.

Direct Data Entry Web Portal Link: https://pathreporting.ccr.ca.gov/directdataentry/

6.9 Vendor Self-Initiated Testing

CCR will provide a web page and associated service to upload test files for automatic evaluation and feedback on pathology reports with any identified issues. The self-testing tool will validate test messages for structure and format. The file will be checked to determine that it is parsable, and that the required fields are completed. Edits will then be run against the submitted file. Multiple record types from pathology laboratory vendors may be needed. If the files pass, the service will update their user account allowing them to send that version of the record to CCR. If the file fails, a list of errors will be returned and/or displayed.

Vendor Self-Initiated Testing Link: https://pathreporting.ccr.ca.gov/selftesting/

6.10 On-boarding Process

CCR will conduct outreach to entities registered and begin organization and laboratory specific testing. Organization and laboratory specific testing will require a defined method of reporting to be finalized. Depending upon the method of reporting, subsequent tasks involved to create and establish a direct connection with CCR may be required. Pathology labs submitting data on behalf of pathologists will be required to participate in a testing and validation process with CCR. CCR will work with pathology labs and their representatives and/or vendor representatives to ensure the data being submitted to CCR meets formatting and completeness requirements.