



CALIFORNIA CANCER REPORTING SYSTEM STANDARDS

VOLUME II

STANDARDS FOR AUTOMATED REPORTING

Record Layout Version 18

September 2019

Prepared By:

California Cancer Registry

Cancer Informatics and IT Systems Unit

Editors:

 Ghenadie Ciornii

 Jenna Mazreku, CTR

TABLE OF CONTENTS

PART I INTRODUCTION	1
SECTION I.1 SUMMARY OF CHANGES.....	1
PART II DATA TRANSMISSION STANDARDS	14
SECTION II.1 SUMMARY.....	14
SECTION II.2 EXPLANATORY NOTES.....	14
SECTION II.3 TRANSMISSION BETWEEN HOSPITALS AND REGIONS.....	14
II.3.1 Selection of Cases.....	14
II.3.2 New Case Record.....	15
II.3.3 Modified Record.....	15
II.3.4 Shared Follow-Up Record.....	17
II.3.5 Deletion Record.....	17
SECTION II.4 DATA TRANSMITTAL FORMAT.....	17
SECTION II.5 RULES FOR COMPUTER-GENERATED DATA ITEMS REQUIRED BY CALIFORNIA.....	18
II.5.2 End of Record.....	18
II.5.3 Record Type.....	18
II.5.4 NAACCR or Central Registry Record Version.....	18
SECTION II.6 RULES TO COMPUTER GENERATE DATA ITEMS FOR STANDARD SETTING ORGANIZATIONS.....	18
II.6.1 Data Items.....	19
PART III QUALITY CONTROL STANDARDS	20
SECTION III.1 2018 DATA CONVERSIONS.....	20
SECTION III.2 EDITS.....	22
SECTION III.3 ACCEPTANCE PROCEDURE.....	22
III.3.1 Acceptance Standards for Software.....	22
III.3.2 Test Submission.....	23
APPENDICES A, B, C, & D (EXCHANGE RECORDS)	23

PART I INTRODUCTION

The reporting of cancer is mandatory under provisions of California's Health and Safety Code.

Hospitals and other reporting facilities are required to report cancer information to the California Cancer Registry using computer reporting systems that meet State standards. This manual, *California Cancer Reporting System Standards Volume II - Standards for Automated Reporting* is intended for hospitals and other reporting facilities or vendors wishing to update their own automated reporting systems or create new reporting systems that comply with State requirements.

The intended audience for this document is system analysts and software developers. It describes the format in which collected data must be reported.

Detailed instructions for collecting and coding data can be found in *Cancer Reporting in California: California Cancer Reporting System Standards, Volume I: Abstracting and Coding Procedures for Hospitals*.

Documentation for computer edits can be found in *Cancer Reporting in California: Data Standards for Regional Registries and California Cancer Registry, California Cancer Reporting System Standards, Volume III*.

Section I.1 Summary of Changes

Changes are identified with **red font color**.

Corrections to the changes are identified by **blue font color**.

In response to requests from users of this document, the exchange records (Appendices A, B, C, & D) are now posted in an Excel (PDF) spreadsheet.

On CCRCAL.ORG, this volume and its related appendix will be listed as follows:

VOLUME II - 2018

California Cancer Reporting Standards: Volume II - 2018 (updated dd/mm/yy)

Volume II Appendices: California Cancer Reporting Standards: (dated dd/mm/yy)

Appendices A, B, C, & D identify each data item with a unique CCR Identifier. This identifier will never change and can be used to uniquely identify a data item to a database system, if such an identifier is needed in your database system.

See Appendix A for the following updates:

- NAACCR Record Version [**180**] (CCR Identifier #E1003) has been revised from 160 to 180 to reflect NAACCR version 18.0.
- All Data items have had their Column Start and Column End revised beginning with Reserved 01 (NAACCR #370).
- Reserved 01 (NAACCR #379) **length is now 16, with start position of 58 and end position 73.**
- **Reserved 04 (NAACCR #750) length is now 50, with start position of 816 and end position 865.**
- Reserved 05 (NAACCR #1180) **length is now 98, with start position of 1996 and end position 2093.**
- Reserved 07 (NAACCR #1300) **length is now 50, with start position of 2521 and end position of 2570.**
- Reserved 08 (NAACCR #1650) **length is now 50, with start position of 2725 and end position 2774.**
- Reserved 09 (NAACCR #1740) **length is now 50, with start position of 2999 and end position 3048.**
- Reserved 10 (NAACCR #1835) **length is now 100, with a start position of 4805 and end position 4904.**
- Reserved 13 (NAACCR #2080) **length is now 250, with a start position of 6685 and end position 6934.**

- **County at DX Reported** (CCR Identifier #E1012) name has been revised from County at DX to County at DX Reported.
- **County at DX Geocode 1970/80/90** (CCR Identifier #E1795) name has been revised from County at DX Geocode1990 to County at DX Geocode 1970/8-/90.
- **Census Block Group 1970/80/90** (CCR Identifier #E1014) name has been revised from Census Block Grp 1970-90 to Census Block Group 1970/80/90.
- The following are **new geocoding data fields**:
 - GeoLocationID – 1970/80/90 (CCR Identifier #E1836)
 - State at DX Geocode 1970/80/90 (CCR Identifier #E1826)
 - GeoLocationID – 2000 (CCR Identifier #E1837)
 - State at DX Geocode 2000 (CCR Identifier #E1827)
 - GeoLocationID – 2010 (CCR Identifier #E1838)
 - State at DX Geocode 2010 (CCR Identifier #E1828)
 - GeoLocationID – 2020 (CCR Identifier #E1839)
 - State at DX Geocode 2020 (CCR Identifier #E1829)
 - Census Tract 2020 (CCR Identifier #E1831)
 - Census Block Group 2020 (CCR Identifier #E1840)
 - Census Tract Certainty 2020 (CCR Identifier #E1841)
- The following are **new fields generated for extract**:
 - County at DX Analysis (CCR Identifier #E1830)
 - RUCA 2000 (CCR Identifier #E1832)
 - RUCA 2010 (CCR Identifier #E1833)
 - URIC 2000 (CCR Identifier #E1834)
 - URIC 2010 (CCR Identifier #E1835)
- The following data fields are **now required for DX Year < 2018**:
 - Grade (CCR Identifier #E1063)
 - Rad--Regional RX Modality (CCR Identifier #E1356)
- The following data fields had **their required status updated to match requirements, schema related and not required for DX Year <2010 and > 2015**:
 - Grade Path Value (CCR Identifier #E1064)
 - Grade Path System (CCR Identifier #E1065)
- The following data fields are **now required for DX Year 2016-2017**:
 - TNM Path Staged By (CCR Identifier #E1151)
 - TNM Clin Staged By (CCR Identifier #E1157)
 - TNM Path T (CCR Identifier #E1146)
 - TNM Path N (CCR Identifier #E1147)
 - TNM Path M (CCR Identifier #E1148)
 - TNM Path Stage Group (CCR Identifier #E1149)
 - TNM Path Descriptor (CCR Identifier #E1150)
 - TNM Clin T (CCR Identifier #E1152)
 - TNM Clin N (CCR Identifier #E1153)
 - TNM Clin M (CCR Identifier #E1154)
 - TNM Clin Stage Group (CCR Identifier #E1155)
 - TNM Clin Descriptor (CCR Identifier #E1156)
- **EOD Primary Tumor** (CCR Identifier #E1805) name has been revised from SEER Primary Tumor to EOD Primary Tumor. **Also, now required 2018 and forward.**
- **EOD Regional Nodes** (CCR Identifier #E1806) name has been revised from SEER Regional Nodes to EOD Regional Nodes. **Also, now required 2018 and forward.**

- **EOD Mets** (CCR Identifier #E1807) name has been revised from SEER Mets to EOD Mets. **Also, now required 2018 and forward.**
- **Derived Summary Stage 2018** (CCR Identifier #E1803) name has been revised from Derived SS2017 to Derived Summary Stage 2018. **Also, no longer required.**
- **Summary Stage 2018** (CCR Identifier #E1804) name has been revised from Directly Assigned SS2017 to Summary Stage 2018. **Also, now required for DX Year 2018 and forward.**
- SEER Summary Stage 2000 (CCR Identifier #E1132) is **now required for DX Year 2001 – 2017.**
- The following are **new data fields required for DX Year 2018 and forward:**
 - Grade Clinical (CCR Identifier #E1956)
 - Grade Pathological (CCR Identifier #E1957)
 - Grade Post Therapy (CCR Identifier #E1958)
 - AJCC ID (CCR Identifier #E1852)
 - Schema ID (CCR Identifier #E1913)
 - SEER Site-Specific Fact 1 (CCR Identifier #E1246)
 - Phase I Radiation Treatment Modality (CCR Identifier #E1876)
 - Phase I Radiation External Beam Planning Tech (CCR Identifier #E1872)
 - Phase II Radiation Treatment Modality (CCR Identifier #E1883)
 - Phase II Radiation External Beam Planning Tech (CCR Identifier #E1879)
 - Phase III Radiation Treatment Modality (CCR Identifier #E1890)
 - Phase III Radiation External Beam Planning Tech (CCR Identifier #E1886)
- **Lymphovascular Invasion** (CCR Identifier #E1164) name has been revised from Lymph-vascular Invasion to Lymphovascular Invasion.
- The following are **new data fields that are not required:**
 - Derived EOD 2018 T (CCR Identifier #E1844)
 - Derived EOD 2018 N (CCR Identifier #E1846)
 - Derived EOD 2018 M (CCR Identifier #E1845)
 - Derived EOD 2018 Stage Group (CCR Identifier #E1847)
 - NPCR Derived AJCC 8 TNM Clin Stg Grp (CCR Identifier #E1910)
 - NPCR Derived AJCC 8 TNM Path Stg Grp (CCR Identifier #E1911)
 - NPCR Derived AJCC 8 TNM Post Therapy Stg Grp (CCR Identifier #E1912)
 - Over-ride TNM 3 (CCR Identifier #E1904)
 - RQRS NCDB Submission Flag (CCR Identifier #E1897)
 - Vital Status Recode (CCR Identifier #E1895)
 - Record Number Recode (CCR Identifier #E1898)
 - SEER Cause Specific COD (CCR Identifier #E1899)
 - SEER Other COD (CCR Identifier #E1900)
 - EHR Reporting (CCR Identifier #E1909)
- Over-ride Name Sex (CCR Identifier #E1560) **is no longer required.**
- The following are **new data fields required for DX Year 2018 forward for Melanoma of Skin and Breast:**
 - Sentinel Lymph Nodes Positive (CCR Identifier #E1851)
 - Sentinel Lymph Nodes Examined (CCR Identifier #E1850)
 - Date of Sentinel Lymph Node Biopsy (CCR Identifier #E1848)
 - Date of Sentinel Lymph Node Biopsy Flag (CCR Identifier #E1849)
- The following are **new data fields required as available:**
 - Over-ride TNM Stage (CCR Identifier #E1901)
 - Over-ride TNM Tis (CCR Identifier #E1903)
 - Over-ride Name/Sex (CCR Identifier #E1895)
 - Medicare Beneficiary Identifier (CCR Identifier #E1908)

- The following data fields are **now required, site specific for DX Year 2004 – 2017**:
 - CS Site-Specific Factor 1 (CCR Identifier #E1176)
 - CS Site-Specific Factor 2 (CCR Identifier #E1177)
 - CS Site-Specific Factor 3 (CCR Identifier #E1178)
 - CS Site-Specific Factor 4 (CCR Identifier #E1179)
 - CS Site-Specific Factor 5 (CCR Identifier #E1180)
 - CS Site-Specific Factor 6 (CCR Identifier #E1181)
 - CS Site-Specific Factor 7 (CCR Identifier #E1182)
 - CS Site-Specific Factor 8 (CCR Identifier #E1183)
 - CS Site-Specific Factor 9 (CCR Identifier #E1184)
 - CS Site-Specific Factor 10 (CCR Identifier #E1185)
 - CS Site-Specific Factor 11 (CCR Identifier #E1186)
 - CS Site-Specific Factor 12 (CCR Identifier #E1187)
 - CS Site-Specific Factor 13 (CCR Identifier #E1188)
 - CS Site-Specific Factor 14 (CCR Identifier #E1189)
 - CS Site-Specific Factor 15 (CCR Identifier #E1190)
 - CS Site-Specific Factor 16 (CCR Identifier #E1191)
 - CS Site-Specific Factor 17 (CCR Identifier #E1192)
 - CS Site-Specific Factor 18 (CCR Identifier #E1193)
 - CS Site-Specific Factor 19 (CCR Identifier #E1194)
 - CS Site-Specific Factor 20 (CCR Identifier #E1195)
 - CS Site-Specific Factor 21 (CCR Identifier #E1196)
 - CS Site-Specific Factor 22 (CCR Identifier #E1197)
 - CS Site-Specific Factor 23 (CCR Identifier #E1198)
 - CS Site-Specific Factor 24 (CCR Identifier #E1199)
 - CS Site-Specific Factor 25 (CCR Identifier #E1200)
 - CS Version Input Current (CCR Identifier #E1243)
 - CS Version Input Original (CCR Identifier #E1244)
- The following are **new data fields required, site specific for DX Year 2018 forward**:
 - Schema Discriminator 1 (CCR Identifier #E2038)
 - Schema Discriminator 2 (CCR Identifier #E2039)
 - Schema Discriminator 3 (CCR Identifier #E2040)
 - Chromosome 1p: Loss of Heterozygosity (LOH) (CCR Identifier #E1914)
 - Chromosome 19q: Loss of Heterozygosity (LOH) (CCR Identifier #E1915)
 - Methylation of O6-Methylguanine-Methyltransferase (CCR Identifier #E2002)
 - Estrogen Receptor Summary (CCR Identifier #E1940)
 - HER2 Overall Summary (CCR Identifier #E1968)
 - LN Positive Axillary Level I-II (CCR Identifier #E1995)
 - Multigene Signature Method (CCR Identifier #E2007)
 - Multigene Signature Results (CCR Identifier #E2008)
 - Progesterone Receptor Summary (CCR Identifier #E2027)
 - Oncotype Dx Recurrence Score-Invasive (CCR Identifier #E2017)
 - CEA Pretreatment Interpretation (CCR Identifier #E1932)
 - CEA Pretreatment Lab Value (CCR Identifier #E1933)
 - Circumferential Resection Margin (CRM) (CCR Identifier #E1936)
 - KRAS (CCR Identifier #E1979)
 - Microsatellite Instability (MSI) (CCR Identifier #E2003)
 - Perineural Invasion (CCR Identifier #E2022)

- Tumor Deposits (CCR Identifier #E2046)
- Peritoneal Cytology (CCR Identifier #E2024)
- Esophagus and EGJ Tumor Epicenter (CCR Identifier #E1942)
- FIGO Stage (CCR Identifier #E1949)
- Extranodal Extension Head and Neck Pathological (CCR Identifier #E1945)
- LN Head and Neck Levels I-III (CCR Identifier #E1989)
- LN Head and Neck Levels IV-V (CCR Identifier #E1990)
- LN Head and Neck Levels VI-VII (CCR Identifier #E1991)
- LN Head and Neck Other (CCR Identifier #E1992)
- LN Size (CCR Identifier #E1996)
- JAK2 (CCR Identifier #E1975)
- Tumor Growth Pattern (CCR Identifier #E2047)
- Ipsilateral Adrenal Gland Involvement (CCR Identifier #E1974)
- Invasion Beyond Capsule (CCR Identifier #E1977)
- Major Vein Involvement (CCR Identifier #E1999)
- Sarcomatoid Features (CCR Identifier #E2037)
- Fibrosis Score (CCR Identifier #E1948)
- Separate Tumor Nodules (CCR Identifier #E2041)
- Visceral and Parietal Pleural Invasion (CCR Identifier #E2049)
- B symptoms (CCR Identifier #E1925)
- HIV Status (CCR Identifier #E1972)
- NCCN International Prognostic Index (IPI) (CCR Identifier #E2009)
- Mitotic Rate Melanoma (CCR Identifier #E2501)
- Measured Basal Diameter (CCR Identifier #E2000)
- Measured Thickness (CCR Identifier #E2001)
- Breslow Tumor Thickness (CCR Identifier #E1930)
- LDH Pretreatment Lab Value (CCR Identifier #E2044)
- Ulceration (CCR Identifier #E2048)
- LN Isolated Tumor Cells (ITC) (CCR Identifier #E1993)
- Profound Immune Suppression (CCR Identifier #E2030)
- Peripheral Blood Involvement (CCR Identifier #E2023)
- Heritable Trait (CCR Identifier #E1969)
- Adenopathy (CCR Identifier #E1917)
- Anemia (CCR Identifier #E1924)
- Lymphocytosis (CCR Identifier #E1998)
- Organomegaly (CCR Identifier #E2020)
- Thrombocytopenia (CCR Identifier #E2045)
- High Risk Cytogenetics (CCR Identifier #E1970)
- LDH Pretreatment Level (CCR Identifier #E1982)
- Serum Albumin Pretreatment Level (CCR Identifier #E2042)
- Serum Beta-2 Microglobulin Pretreatment Level (CCR Identifier #E2043)
- CA-125 Pretreatment Interpretation (CCR Identifier #E1931)
- Residual Tumor Volume Post Cytoreduction (CCR Identifier #E2033)
- Gestational Trophoblastic Prognostic Scoring Index (CCR Identifier #E1950)
- Pleural Effusion (CCR Identifier #E2025)
- Gleason Patterns Clinical (CCR Identifier #E1951)
- Gleason Patterns Pathological (CCR Identifier #E1952)
- Number of Cores Examined (CCR Identifier #E2010)

- Number of Cores Positive (CCR Identifier #E2011)
- Prostate Pathological Extension (CCR Identifier #E2031)
- PSA (Prostatic Specific Antigen) Lab Value (CCR Identifier #E2032)
- High Risk Histologic Features (CCR Identifier #E1971)
- Bone Invasion (CCR Identifier #E1928)
- [AFP Post-Orchiectomy Range \(CCR Identifier #E1919\)](#)
- hCG Pre-Orchiectomy Range (CCR Identifier #E1962)
- hCG Post-Orchiectomy Range (CCR Identifier #E1960)
- LDH Pre-Orchiectomy Range (CCR Identifier #E1981)
- LDH Post-Orchiectomy Range (CCR Identifier #E1980)
- S Category Clinical (CCR Identifier #E2035)
- S Category Pathological (CCR Identifier #E2036)
- LN Status Femoral-Inguinal, Para-Aortic, Pelvic (CCR Identifier #E1997)
- The following are **new data fields required, CoC Only for DX Year 2018 forward**:
 - AJCC TNM Clin T (CCR Identifier #E1853)
 - AJCC TNM Clin T Suffix (CCR Identifier #E1865)
 - AJCC TNM Clin N (CCR Identifier #E1854)
 - AJCC TNM Clin N Suffix (CCR Identifier #E1868)
 - AJCC TNM Clin M (CCR Identifier #E1855)
 - AJCC TNM Clin Stage Group (CCR Identifier #E1856)
 - AJCC TNM Path T (CCR Identifier #E1857)
 - AJCC TNM Path T Suffix (CCR Identifier #E1866)
 - AJCC TNM Path N (CCR Identifier #E1858)
 - AJCC TNM Path N Suffix (CCR Identifier #E1869)
 - AJCC TNM Path M (CCR Identifier #E1859)
 - AJCC TNM Path Stage Group (CCR Identifier #E1860)
 - AJCC TNM Post Therapy T (CCR Identifier #E1861)
 - AJCC TNM Post Therapy T Suffix (CCR Identifier #E1867)
 - AJCC TNM Post Therapy N (CCR Identifier #E1862)
 - AJCC TNM Post Therapy N Suffix (CCR Identifier #E1870)
 - AJCC TNM Post Therapy M (CCR Identifier #E1863)
 - AJCC Post Therapy Stage Group (CCR Identifier #E1864)
 - Date Regional Lymph Node Dissection (CCR Identifier #E1842)
 - Date Regional Lymph Node Dissection Flag (CCR Identifier #E1843)
 - Percent Necrosis Post Neoadjuvant (CCR Identifier #E2021)
 - Response to Neoadjuvant Therapy (CCR Identifier #E2034)
 - Estrogen Receptor Percent Positive or Range (CCR Identifier #E1939)
 - Estrogen Receptor Total Allred Score (CCR Identifier #E1941)
 - [HER2 IHC Summary \(CCR Identifier #E1963\)](#)
 - [HER2 ISH Dual Probe Copy Number \(CCR Identifier #E1964\)](#)
 - [HER2 ISH Dual Probe Ratio \(CCR Identifier #E1965\)](#)
 - [HER2 ISH Single Probe Copy Number \(CCR Identifier #E1966\)](#)
 - [HER2 ISH Summary \(CCR Identifier #E1967\)](#)
 - [Ki-67 \(CCR Identifier #E1976\)](#)
 - [Oncotype Dx Recurrence Score-DCIS \(CCR Identifier #E2016\)](#)
 - Oncotype Dx Risk Level-DCIS (CCR Identifier #E2018)
 - Oncotype Dx Risk Level-Invasive (CCR Identifier #E2019)
 - Progesterone Receptor Percent Positive or Range (CCR Identifier #E2026)

- Progesterone Receptor Total Allred Score (CCR Identifier #E2028)
- KIT Gene Immunohistochemistry (CCR Identifier #E1978)
- [Number of Positive Para-Aortic Nodes \(CCR Identifier #E2014\)](#)
- [Number of Examined Para-Aortic Nodes \(CCR Identifier #E2012\)](#)
- [Number of Positive Pelvic Nodes \(CCR Identifier #E2015\)](#)
- [Number of Examined Pelvic Nodes \(CCR Identifier #E2013\)](#)
- Primary Sclerosing Cholangitis (CCR Identifier #E2029)
- AFP Pretreatment Interpretation (CCR Identifier #E1922)
- Extranodal Extension Head and Neck Clinical (CCR Identifier #E1944)
- AFP Pretreatment Lab Value (CCR Identifier #E1923)
- Bilirubin Pretreatment Total Lab Value (CCR Identifier #E1926)
- Bilirubin Pretreatment Unit of Measure (CCR Identifier #E1927)
- Creatinine Pretreatment Lab Value (CCR Identifier #E1937)
- Creatinine Pretreatment Unit of Measure (CCR Identifier #E1938)
- International Normalized Ratio Prothrombin Time (CCR Identifier #E1973)
- Chromosome 3 Status (CCR Identifier #E1934)
- Chromosome 8q Status (CCR Identifier #E1935)
- Extravascular Matrix Patterns (CCR Identifier #E1947)
- Microvascular Density (CCR Identifier #E2004)
- Mitotic Count Uveal Melanoma (CCR Identifier #E2006)
- LDH Upper Limits of Normal (CCR Identifier #E1983)
- Extranodal Extension Clin (non-Head and Neck) (CCR Identifier #E1943)
- Extranodal Extension Path (non-Head and Neck) (CCR Identifier #E1946)
- Gleason Score Clinical (CCR Identifier #E1953)
- Gleason Score Pathological (CCR Identifier #E1954)
- Gleason Tertiary Pattern (CCR Identifier #E1955)
- AFP Pre-Orchiectomy Range (CCR Identifier #E1921)
- AFP Post-Orchiectomy Lab Value (CCR Identifier #E1918)
- AFP Pre-Orchiectomy Lab Value (CCR Identifier #E1920)
- hCG Pre-Orchiectomy Lab Value (CCR Identifier #E1961)
- hCG Post-Orchiectomy Lab Value (CCR Identifier #E1959)
- LN Assessment Method Para-Aortic (CCR Identifier #E1985)
- LN Assessment Method Pelvic (CCR Identifier #E1986)
- LN Distant Assessment Method (CCR Identifier #E1987)
- LN Distant: Mediastinal, Scalene (CCR Identifier #E1988)
- LN Assessment Method Femoral-Inguinal (CCR Identifier #E1984)
- LN Laterality (CCR Identifier #E1994)
- Brain Molecular Markers (CCR Identifier #E1929)
- The following are **new data fields are required as available for DX Year 2018 forward:**
 - Phase I Radiation Primary Treatment Volume (CCR Identifier #E1874)
 - Phase I Radiation to Draining Lymph Nodes (CCR Identifier #E1875)
 - Phase I Dose per Fraction (CCR Identifier #E1871)
 - Phase I Number of Fractions (CCR Identifier #E1873)
 - Phase I Total Dose (CCR Identifier #E1877)
 - Phase II Radiation Primary Treatment Volume (CCR Identifier #E1881)
 - Phase II Radiation to Draining Lymph Nodes (CCR Identifier #E1882)
 - Phase II Dose per Fraction (CCR Identifier #E1878)
 - Phase II Number of Fractions (CCR Identifier #E1880)

- Phase II Total Dose (CCR Identifier #E1884)
- Phase III Radiation Primary Treatment Volume (CCR Identifier #E1888)
- Phase III Radiation to Draining Lymph Nodes (CCR Identifier #E1889)
- Phase III Dose per Fraction (CCR Identifier #E1885)
- Phase III Number of Fractions (CCR Identifier #E1887)
- Phase III Total Dose (CCR Identifier #E1891)
- Number of Phases of Rad Treatment to this Volume (CCR Identifier #E1893)
- Radiation Treatment Discontinued Early (CCR Identifier #E1892)
- Total Dose (CCR Identifier #E1894)
- RX Summ—Radiation (CCR Identifier #E1341) is only **required for DX Year < 2018 and is no longer generated in database.**
- The following **data fields are no longer required:**
 - Rad--Boost RX Modality (CCR Identifier #E1357)
 - Subsq RX 2nd Course Date (CCR Identifier #E1388)
- The following **new data fields are required:**
 - CoC Accredited Flag (CCR Identifier #E1896)
 - Date of Last Cancer (tumor) Status (CCR Identifier #E1896)
 - Date of Last Cancer (tumor) Status Flag (CCR Identifier #E1897)
- Coding Proc (CCR Identifier #E1576) updated to **34.**
- SEER EOD Derived Version (CCR Identifier #E2500) is a **new data field required for DX Year 2018 and forward.**
- End of Record [.] **removed from record layout.**

See Appendix B for the following updates:

- **The Data Item Name, Col Start, Col End, Length, and CCR Required from Reporting Facility updates made in Appendix A are also updated in Appendix B.**
- The following **new fields now trigger a Modified Record when updated:**
 - Date Regional Lymph Node Dissection (CCR Identifier #E1842)
 - Date Regional Lymph Node Dissection Flag (CCR Identifier #E1843)
 - Sentinel Lymph Nodes Positive (CCR Identifier #E1851)
 - Sentinel Lymph Nodes Examined (CCR Identifier #E1850)
 - Date of Sentinel Lymph Node Biopsy (CCR Identifier #E1848)
 - Date of Sentinel Lymph Node Biopsy Flag (CCR Identifier #E1849)
 - AJCC TNM Clin T (CCR Identifier #E1853)
 - AJCC TNM Clin T Suffix (CCR Identifier #E1865)
 - AJCC TNM Clin N (CCR Identifier #E1854)
 - AJCC TNM Clin N Suffix (CCR Identifier #E1868)
 - AJCC TNM Clin M (CCR Identifier #E1855)
 - AJCC TNM Clin Stage Group (CCR Identifier #E1856)
 - AJCC TNM Path T (CCR Identifier #E1857)
 - AJCC TNM Path T Suffix (CCR Identifier #E1866)
 - AJCC TNM Path N (CCR Identifier #E1858)
 - AJCC TNM Path N Suffix (CCR Identifier #E1869)
 - AJCC TNM Path M (CCR Identifier #E1859)
 - AJCC TNM Path Stage Group (CCR Identifier #E1860)
 - AJCC TNM Post Therapy T (CCR Identifier #E1861)

- AJCC TNM Post Therapy T Suffix (CCR Identifier #E1867)
- AJCC TNM Post Therapy N (CCR Identifier #E1862)
- AJCC TNM Post Therapy N Suffix (CCR Identifier #E1870)
- AJCC TNM Post Therapy M (CCR Identifier #E1863)
- AJCC TNM Post Therapy Stage Group (CCR Identifier #E1864)
- Grade Clinical (CCR Identifier #E1956)
- Grade Pathological (CCR Identifier #E1957)
- Grade Post Therapy (CCR Identifier #E1958)
- AJCC ID (CCR Identifier #E1852)
- Schema ID (CCR Identifier #E1913)
- Schema Discriminator 1 (CCR Identifier #E2038)
- Schema Discriminator 2 (CCR Identifier #E2039)
- Schema Discriminator 3 (CCR Identifier #E2040)
- Percent Necrosis Post Neoadjuvant (CCR Identifier #E2021)
- Chromosome 1p: Loss of Heterozygosity (LOH) (CCR Identifier #E1914)
- Chromosome 19q: Loss of Heterozygosity (LOH) (CCR Identifier #E1915)
- Methylation of O6-Methylguanine-Methyltransferase (CCR Identifier #E2002)
- Estrogen Receptor Summary (CCR Identifier #E1940)
- HER2 Overall Summary (CCR Identifier #E1968)
- LN Positive Axillary Level I-II (CCR Identifier #E1995)
- Multigene Signature Method (CCR Identifier #E2007)
- Multigene Signature Results (CCR Identifier #E2008)
- Progesterone Receptor Summary (CCR Identifier #E2027)
- Response to Neoadjuvant Therapy (CCR Identifier #E2034)
- Estrogen Receptor Percent Positive or Range (CCR Identifier #E1939)
- Estrogen Receptor Total Allred Score (CCR Identifier #E1941)
- HER2 IHC Summary (CCR Identifier #E1963)
- HER2 ISH Dual Probe Copy Number (CCR Identifier #E1964)
- HER2 ISH Dual Probe Ratio (CCR Identifier #E1965)
- HER2 ISH Single Probe Copy Number (CCR Identifier #E1966)
- HER2 ISH Summary (CCR Identifier #E1967)
- Ki-67 (CCR Identifier #E1976)
- Oncotype Dx Recurrence Score-DCIS (CCR Identifier #E2016)
- Oncotype Dx Recurrence Score-Invasive (CCR Identifier #E2017)
- Oncotype Dx Risk Level-DCIS (CCR Identifier #E2018)
- Oncotype Dx Risk Level-Invasive (CCR Identifier #E2019)
- Progesterone Receptor Percent Positive or Range (CCR Identifier #E 2026)
- Progesterone Receptor Total Allred Score (CCR Identifier #E2028)
- CEA Pretreatment Interpretation (CCR Identifier #E1932)
- CEA Pretreatment Lab Value (CCR Identifier #E1933)
- Circumferential Resection Margin (CRM) (CCR Identifier #E1936)
- KRAS (CCR Identifier #E1979)
- Microsatellite Instability (MSI) (CCR Identifier #E2003)
- Perineural Invasion (CCR Identifier #E2022)
- Tumor Deposits (CCR Identifier #E2046)
- Number of Positive Para-Aortic Nodes (CCR Identifier #E2014)
- Number of Examined Para-Aortic Nodes (CCR Identifier #E2012)
- Number of Positive Pelvic Nodes (CCR Identifier #E2015)

- Number of Examined Pelvic Nodes (CCR Identifier #E2013)
- Peritoneal Cytology (CCR Identifier #E2024)
- Esophagus and EGJ Tumor Epicenter (CCR Identifier #E1942)
- KIT Gene Immunohistochemistry (CCR Identifier #E1978)
- FIGO Stage (CCR Identifier #E1949)
- Extranodal Extension Head and Neck Clinical (CCR Identifier #E1944)
- Extranodal Extension Head and Neck Pathological (CCR Identifier #E1945)
- LN Head and Neck Levels I-III (CCR Identifier #E1989)
- LN Head and Neck Levels IV-V (CCR Identifier #E1990)
- LN Head and Neck Levels VI-VII (CCR Identifier #E1991)
- LN Head and Neck Other (CCR Identifier #E1992)
- LN Size (CCR Identifier #E1996)
- JAK2 (CCR Identifier #E1975)
- Primary Sclerosing Cholangitis (CCR Identifier #E2029)
- Tumor Growth Pattern (CCR Identifier #E2047)
- Ipsilateral Adrenal Gland Involvement (CCR Identifier #E1974)
- Invasion Beyond Capsule (CCR Identifier #E1977)
- Major Vein Involvement (CCR Identifier #E1999)
- Sarcomatoid Features (CCR Identifier #E2037)
- Adenoid Cystic Basaloid Pattern (CCR Identifier #E1916)
- AFP Pretreatment Interpretation (CCR Identifier #E1922)
- AFP Pretreatment Lab Value (CCR Identifier #E1923)
- Bilirubin Pretreatment Total Lab Value (CCR Identifier #E1926)
- Bilirubin Pretreatment Unit of Measure (CCR Identifier #E1927)
- Creatinine Pretreatment Lab Value (CCR Identifier #E 1937)
- Creatinine Pretreatment Unit of Measure (CCR Identifier #E1938)
- Fibrosis Score (CCR Identifier #E1948)
- International Normalized Ratio Prothrombin Time (CCR Identifier #E1973)
- Separate Tumor Nodules (CCR Identifier #E2041)
- Visceral and Parietal Pleural Invasion (CCR Identifier #E2049)
- B symptoms (CCR Identifier #E1925)
- HIV Status (CCR Identifier #E1972)
- NCCN International Prognostic Index (IPI) (CCR Identifier #E2009)
- Mitotic Rate Melanoma (CCR Identifier #E2501)
- Chromosome 3 Status (CCR Identifier #E1934)
- Chromosome 8q Status (CCR Identifier #E1935)
- Extravascular Matrix Patterns (CCR Identifier #E1947)
- Measured Basal Diameter (CCR Identifier #E2000)
- Measured Thickness (CCR Identifier #E2001)
- Microvascular Density (CCR Identifier #E2004)
- Mitotic Count Uveal Melanoma (CCR Identifier #E2006)
- Breslow Tumor Thickness (CCR Identifier #E1930)
- LDH Upper Limits of Normal (CCR Identifier #E1983)
- LDH Pretreatment Lab Value (CCR Identifier #E2044)
- Ulceration (CCR Identifier #E2048)
- LN Isolated Tumor Cells (ITC) (CCR Identifier #E1993)
- Profound Immune Suppression (CCR Identifier #E2030)
- Peripheral Blood Involvement (CCR Identifier #E2023)

- Heritable Trait (CCR Identifier #E1969)
- Adenopathy (CCR Identifier #E1917)
- Anemia (CCR Identifier #E1924)
- Lymphocytosis (CCR Identifier #E1998)
- Organomegaly (CCR Identifier #E2020)
- Thrombocytopenia (CCR Identifier #E2045)
- High Risk Cytogenetics (CCR Identifier #E1970)
- LDH Pretreatment Level (CCR Identifier #E1982)
- Serum Albumin Pretreatment Level (CCR Identifier #E2042)
- Serum Beta-2 Microglobulin Pretreatment Level (CCR Identifier #E2043)
- CA-125 Pretreatment Interpretation (CCR Identifier #E1931)
- Residual Tumor Volume Post Cyto-reduction (CCR Identifier #E2033)
- Extranodal Extension Clin (non-Head and Neck) (CCR Identifier #E1943)
- Extranodal Extension Path (non-Head and Neck) (CCR Identifier #E 1946)
- Gestational Trophoblastic Prognostic Scoring Index (CCR Identifier #E1950)
- Pleural Effusion (CCR Identifier #E2025)
- Gleason Patterns Clinical (CCR Identifier #E1951)
- Gleason Patterns Pathological (CCR Identifier #E1952)
- Gleason Score Clinical (CCR Identifier #E1953)
- Gleason Score Pathological (CCR Identifier #E1954)
- Gleason Tertiary Pattern (CCR Identifier #E1955)
- Number of Cores Examined (CCR Identifier #E2010)
- Number of Cores Positive (CCR Identifier #E2011)
- Prostate Pathological Extension (CCR Identifier #E2031)
- PSA (Prostatic Specific Antigen) Lab Value (CCR Identifier #E2032)
- High Risk Histologic Features (CCR Identifier #E1971)
- Bone Invasion (CCR Identifier #E1928)
- AFP Pre-Orchiectomy Lab Value (CCR Identifier #E1920)
- AFP Pre-Orchiectomy Range (CCR Identifier #E1921)
- AFP Post-Orchiectomy Lab Value (CCR Identifier #E1918)
- AFP Post-Orchiectomy Range (CCR Identifier #E1919)
- hCG Pre-Orchiectomy Lab Value (CCR Identifier #E1961)
- hCG Pre-Orchiectomy Range (CCR Identifier #E1962)
- hCG Post-Orchiectomy Lab Value (CCR Identifier #E1959)
- hCG Post-Orchiectomy Range (CCR Identifier #E1960)
- LDH Pre-Orchiectomy Range (CCR Identifier #E1981)
- LDH Post-Orchiectomy Range (CCR Identifier #E1980)
- S Category Clinical (CCR Identifier #E2035)
- S Category Pathological (CCR Identifier #E2036)
- LN Assessment Method Para-Aortic (CCR Identifier #E1985)
- LN Assessment Method Pelvic (CCR Identifier #E1986)
- LN Distant Assessment Method (CCR Identifier #E1987)
- LN Distant: Mediastinal, Scalene (CCR Identifier #E1988)
- LN Status Femoral-Inguinal, Para-Aortic, Pelvic (CCR Identifier #E1997)
- LN Assessment Method Femoral-Inguinal (CCR Identifier #E1984)
- LN Laterality (CCR Identifier #E1994)
- Brain Molecular Markers (CCR Identifier #E1929)
- Phase I Radiation Primary Treatment Volume (CCR Identifier #E1874)

- Phase I Radiation to Draining Lymph Nodes (CCR Identifier #E1875)
- Phase I Radiation Treatment Modality (CCR Identifier #E1876)
- Phase I Radiation External Beam Planning Tech (CCR Identifier #E1872)
- Phase I Dose per Fraction (CCR Identifier #E1871)
- Phase I Number of Fractions (CCR Identifier #E1873)
- Phase I Total Dose (CCR Identifier #E1877)
- Phase II Radiation Primary Treatment Volume (CCR Identifier #E1881)
- Phase II Radiation to Draining Lymph Nodes (CCR Identifier #E1882)
- Phase II Radiation Treatment Modality (CCR Identifier #E1883)
- Phase II Radiation External Beam Planning Tech (CCR Identifier #E1879)
- Phase II Dose per Fraction (CCR Identifier #E1878)
- Phase II Number of Fractions (CCR Identifier #E1880)
- Phase II Total Dose (CCR Identifier #E1884)
- Phase III Radiation Primary Treatment Volume (CCR Identifier #E1888)
- Phase III Radiation to Draining Lymph Nodes (CCR Identifier #E1889)
- Phase III Radiation Treatment Modality (CCR Identifier #E1890)
- Phase III Radiation External Beam Planning Tech (CCR Identifier #E1886)
- Phase III Dose per Fraction (CCR Identifier #E1885)
- Phase III Number of Fractions (CCR Identifier #E1887)
- Phase III Total Dose (CCR Identifier #E1891)
- Number of Phases of Rad Treatment to this Volume (CCR Identifier #E1893)
- Radiation Treatment Discontinued Early (CCR Identifier #E1892)
- Total Dose (CCR Identifier #E1894)
- Over-ride TNM Stage (CCR Identifier #E1901)
- Over-ride TNM Tis (CCR Identifier #E1903)
- Over-ride Name/Sex (CCR Identifier #E1905)
- CoC Accredited Flag (CCR Identifier #E1906)
- Date of Last Cancer (tumor) Status (CCR Identifier #E1896)
- Date of Last Cancer (tumor) Status Flag (CCR Identifier #E1897)
- Medicare Beneficiary Identifier (CCR Identifier #E1908)
- SEER EOD Derived Version (CCR Identifier #E2500)
- The following **new fields do not trigger a Modified Record when updated:**
 - County at DX Analysis (CCR Identifier #E1830)
 - State at DX Geocode 1970/80/90 (CCR Identifier #E1826)
 - State at DX Geocode 2000 (CCR Identifier #E1827)
 - State at DX Geocode 2010 (CCR Identifier #E1828)
 - State at DX Geocode 2020 (CCR Identifier #E1829)
 - Census Tract 2020 (CCR Identifier #E1831)
 - Census Block Group 2020 (CCR Identifier #E1840)
 - Census Tract Certainty 2020 (CCR Identifier #E1841)
 - RUCA 2000 (CCR Identifier #E1832)
 - RUCA 2010 (CCR Identifier #E1833)
 - URIC 2000 (CCR Identifier #E1834)
 - URIC 2010 (CCR Identifier #E1835)
 - Derived EOD 2018 T (CCR Identifier #E1844)
 - Derived EOD 2018 N (CCR Identifier #E1846)
 - Derived EOD 2018 M (CCR Identifier #E1845)
 - Derived EOD 2018 Stage Group (CCR Identifier #E1847)

- NPCR Derived AJCC 8 TNM Clin Stg Grp (CCR Identifier #E1910)
- NPCR Derived AJCC 8 TNM Path Stg Grp (CCR Identifier #E1911)
- NPCR Derived AJCC 8 TNM Post Therapy Stg Grp (CCR Identifier #E1912)
- RQRS NCDB Submission Flag (CCR Identifier #E1907)
- Vital Status Recode (CCR Identifier #E1895)
- Record Number Recode (CCR Identifier #E1898)
- SEER Cause Specific COD (CCR Identifier #E1899)
- SEER Other COD (CCR Identifier #E1900)
- EHR Reporting (CCR Identifier #E1909)
- Over-ride TNM 3 (CCR Identifier #E1904)
- The following fields **now trigger a Modified Record when updated:**
 - SEER Site-Specific Fact 1 (CCR Identifier #E1246)
- The following fields **no longer trigger a Modified Record when updated:**
 - Rad--Regional RX Modality (CCR Identifier #E1356)
 - Rad--Boost RX Modality (CCR Identifier #E1357)
 - Subsq RX 2nd Course Date (CCR Identifier #E1388)
 - Date Cancer Status (CCR Identifier #E1582)
 - Date Cancer Status Flag (CCR Identifier #E1583)
 - ACOS Approved Flag (CCR Identifier #E1608)
 - Over-ride Name Sex (CCR Identifier #E1560)

See Appendix C for the following updates:

- Record Version (CCR Identifier #E1003) has been updated to O.
- **Date of Last Cancer (tumor) Status (CCR Identifier #E)** replaced **Date Cancer Status (CCR Identifier #E1582)**.
- **Date of Last Cancer (tumor) Status Flag (CCR Identifier #E)** replaced **Date Cancer Status Flag (CCR Identifier #E1583)**.
- End of Record [.] **removed from record layout.**

See Appendix D for the following updates:

- End of Record [.] **removed from record layout.**

PART II DATA TRANSMISSION STANDARDS

Section II.1 Summary

Communication between a reporting facility and the California Cancer Registry (CCR) can be of two forms: some types of records are transmitted from the reporting facility to the CCR, and other types of records are transmitted from the CCR to the reporting facility.

Currently, there are three record types that must be transmitted from the reporting facility to the central registry. They are: New Case Records, Modified Records, and Deletion Records. All of these record types are described in Section II.3. A reporting facility cancer registry is required to submit all three types of records, following the procedures described below, to be in compliance with the California Cancer Reporting System Standards, Volume II.

There is one type of record that is sent from the central registry to the reporting facility. This is Shared Follow-Up, described in Section II.4. Acceptance of that record by the reporting facility is optional (although we strongly recommend it).

Cases should NOT be transmitted to the CCR using a format that is earlier than the year that the case is reportable. For example, 2010 cases, as defined by the CCR casefinding rules, cannot be submitted in the format required in 2009.

Section II.2 Explanatory Notes

Reporting requirements vary by item and record type and are listed in the "CCR Required from Reporting Facility" column in the Appendices. Each record type is described in a table, which must be consulted to determine whether or not a particular item is required. The following key explains the terms used in the "CCR Required from Reporting Facility" column.

Table 1. Key to Symbols

no	Not required. It is optional for the facility to submit this data item value to the central registry.
yes	Required. The facility must submit this data item value to the central registry.
yes*	Required if available. If the information can be obtained, the facility must submit it to the central registry. If not available or not applicable, may be left blank.
conditional	Required on selected cases dependent on one or more conditions being true, such as the case's diagnosis date being before or after a certain date.
yes, gen by facility	Required, but the facility's registry software must generate the data item value based on a standard algorithm, rather than a user manually entering the data item value.

Items that are facility-generated are described in more detail, including allowable values in Cancer Reporting in California, Data Standards for Regional Registries and California Cancer Registry (California Cancer Reporting System Standards, Volume III).

Section II.3 Transmission between Hospitals and Regions

II.3.1 Selection of Cases

Only cases which are reportable under California Cancer Registry (CCR) requirements are to be included in transmissions to the CCR. A reporting facility may elect to abstract certain benign conditions or skin cancers to meet local interest or ACoS requirements; however, these cases are not to be transmitted to the CCR.

Transmit all cases with a 2 or 3 (in situ or malignant) in Histology - Behavior, EXCEPT the following histologies occurring in the skin (site codes C44.0 -C44.9):

- 8000-8005 Neoplasms, malignant, NOS of the skin
- 8010-8046 Epithelial carcinomas of the skin
- 8050-8084 Papillary and squamous cell carcinomas of the skin
- 8090-8110 Basal cell carcinomas of the skin

In addition, for cases diagnosed after 1995, do not transmit any in situ (Histology - Behavior of 2) of the cervix (site codes C53.0 - C53.9). Beginning with cases diagnosed January 1, 2001, benign (behavior code 0) and uncertain behavior (behavior code 1) intracranial and central nervous system tumors are reportable. Borderline ovarian tumors (behavior code 1) in ICD-O-3 are no longer reportable, effective with cases diagnosed January 1, 2016 and forward.

II.3.2 New Case Record

For every abstract of a reportable case that is completed at the reporting facility, a New Case Record must be sent to the CCR. Timing considerations for reporting are discussed in Standards, Volume I, Section IX.1.1.

The format for the New Case record is specified in Appendix A. (Key to symbols is in Section II.2.)

II.3.3 Modified Record

The CCR now requires facilities to use the Modified Record instead of the former Update/Correction and Follow-Up Records to transmit data modifications for abstracts already submitted as New Case Records. The Modified Record, record type M, has the same length (22824 characters) and contains the same fields in the same locations as the New Case Record, record type A. The field Follow-up Flag is the only field that has a different requirement status between the two record types. The flag documents if the Modified Record contains updates to fields identified to contain follow-up information. Vendors will be responsible for generating this field using the following guidelines:

- Generate a flag of 1 in the field Follow-up Flag when an update has been made to any of the following fields:
 - **Date of Last Cancer (tumor) Status.**
 - **Date of Last Cancer (tumor) Status Flag.**
 - Vital Status
 - Date Cancer Status
 - Date Cancer Status Flag
 - Cancer Status
 - Follow-Up Hospital Last
 - Follow-Up Last Type (Patient)
 - Follow-Up Last Type (Tumor)
 - Follow-Up Registry - Next
 - Follow-Up Next Type
 - Physician--Follow-Up
 - Cause of Death
 - Place of Death - State
 - DC State File Number
 - Contact Name
 - Addr Current--No & Street
 - Addr Current--Supplementl
 - Addr Current--City

- Addr Current--State
- Addr Current--Postal Code
- Telephone
- Pat No Contact
- Follow-Up Contact--Name
- Follow-Up Contact--No&St
- Follow-Up Contact--Suppl
- Follow-Up Contact--City
- Follow-Up Contact--State
- Follow-Up Contact--Postal
- Place of Death - Country
- Addr Current - Country
- Followup Contact - Country

Unlike the former Update/Correction record, the Modified Record is designed to allow facilities to submit the current version of an abstract, providing the cumulative updates to all of the fields since the original new case was submitted, rather than sending a separate record for each data item change. The Modified Record can only be used once the reporting facility's registry system has been converted to use the latest NAACCR record version and CCR coding procedure standards.

A Modified Record will be sent to the CCR ~~after a case has been transmitted following a monthly (30 day) timeline~~ and will be triggered by the following:

- The reporting facility changes a data item value with an Update Triggers Modified Record specification of yes in Appendix B: Modified Record Layout.

Although only the above criteria will trigger a Modified Record, all data items in the Modified Record will be sent to the CCR. A Modified Record will only be generated by vendor software after an updated field triggered the record as outlined above and ~~30 days have followed since the initial trigger or the facility has chosen to generate Modified Record files in the vendor software.~~ This will allow for multiple changes to be sent in the same Modified Record. ~~A record's first 30-day waiting period starts with the first update after the original new case transmit, and then restarts each time the case is transmitted, as a retransmitted new case or as a modified record, on the day the next post transmit update is made. Vendors will be responsible for tracking this timeline within the software.~~ Hospital registrars will have these Modified Records generated and included in their monthly transmissions to the CCR as appropriate. ~~It is important to note that the timeline should not be altered due to a scheduled monthly transmit to the CCR. If 30 days have not passed since the initial trigger, then the Modified Record should not be transmitted.~~

There should not be any additional work effort placed on the Hospital registrars in regards to generation of these records. The field Date Case Last Changed will continue to be updated by the software ~~during the 30 days~~ to accurately reflect the date the abstract was last updated.

Modified Records will now be rejected from the Eureka database software if they are unable to pass edits, see Section III.1 for further details and requirements.

PLEASE NOTE: DO NOT TRIGGER a Modified Record whenever items change due to the receipt of shared follow-up from the CCR.

See Appendix B for the record layout for Modified records.

II.3.4 Shared Follow-Up Record

Reporting facilities which agree in advance may be able to receive shared follow-up. Whenever the CCR receives follow-up on a reporting facility's patient (and, possibly, that patient's tumor) from a different source (another reporting facility, State death tapes, DMV, etc.), the CCR may make available to the reporting facility the most current follow-up data available on that patient and tumor. The fields Follow-Up Hospital (Last) and Follow-Up - Last Type (Patient) and Follow-Up - Last Type (Tumor) in the Shared Follow-Up record will indicate the type of reporting source that supplied the latest follow-up information being provided.

See Appendix C for the record layout for Shared Follow-Up records. (Key to symbols is in Section II.2.)

II.3.5 Deletion Record

Whenever a reporting facility decides to delete from its database a case that has previously been reported to the CCR, a Deletion record must be transmitted to the CCR,

EXCEPTION: DO NOT transmit a deletion record when the reporting facility is deleting a duplicate or the case is being associated with a new reporting source.

The following special item is used in the record layout for this record type:

Text - Transaction Remarks - This is a 150-character field (3 lines of 50). It must contain a comment indicating the reason for deleting the record.

If a deletion is made because the CCR's regional registry instructed the reporting facility to do so, the Text-Transaction Remarks field should contain only an "R" or "REGION" (all upper case).

See Appendix D for layout of deletion records. (Key to symbols is in Section II.2.)

Section II.4 Data Transmittal Format

Transmitted Data Files

All electronic files must be sent **in a secure manner as instructed by the Central and Regional Registries**. File names must conform to the following schema:

- A three-letter abbreviation assigned by the CCR regional registry to the hospital (the case file suffix).
- Plus, the four-digit year (YYYY) showing the year the file was created.
- Plus, the three-digit day of the year (001 through 366) showing the day the file was created.
- Plus, a single letter (A-Z) showing the sequence within one day the file was created. (Different file types can have the same sequence letter.)
- Plus, a standard suffix according to the record type (see below).

For example, the first file of new cases created on February 1 at hospital abbreviated STJ would be named STJ2015032A.XAA and the second file of new cases created that day would be STJ2015032B.XAA.

The following files may be included, in any order.

Table 2. Data File Types

Record Type	File Suffix	Record Length
New Case	.XAA	24194 plus CR/LF
Modified Record	.XMO	24194 plus CR/LF
Shared Follow-Up	.XSH	804 plus CR/LF
Deletion	.XDL	368 plus CR/LF

Section II.5 Rules for Computer-Generated Data Items Required by California

Please refer to California Cancer Reporting System Standards, Volume III, for specifications for generating the data items referred to in Section II.5.1.2-4.II.5.1 Data Items.

To determine which items to generate in facility software, refer to the *CCR Required from Reporting Facility Software* column in Appendices A, B, C, or D.

Appendix A: New Case Record, NAACCR Version 18.0										
Data Item Name	CCR Identifier	NAACCR Identifier	C/NEXT Identifier	Col Start	Col End	Length	CCR Required from Reporting Facility Software	2018 CCR Requirement Status Notes	Supplied by CCR	2018 Revision Notes (NAACCR v18.0)
Record Type [A]	E1000	10	none	1	1	1	yes, gen by facility		gen for extract	
Registry Type	E1001	30	F01001	2	2	1	no			
Reserved 00	none	37	none	3	16	14				
NAACCR Record Version [180]	E1003	50	none	17	19	3	yes, gen by facility		gen for extract	Record Version number updated to 180 to reflect NAACCR v18.0.
NPI--Registry ID	E1004	45	F03712	20	29	10	yes*			
Registry ID	E1005	40	F04388	30	39	10	yes, gen by facility		gen for extract	
Tumor Record Number	E1006	60	F00127	40	41	2	no		gen in db	
Patient ID Number	E1007	20	none	42	49	8	no		gen in db	
Patient System ID-Hosp	E1008	21	F00003	50	57	8	no			
Reserved 01	none	370	none	58	73	16				

II.5.2 End of Record

~~Must be a period (-)~~ End of Record is denoted with a Carriage Return character followed by a Line Feed character.

II.5.3 Record Type

This is a one-character field used to identify the type of record being processed. The hospital computer system must supply the appropriate code letter at the time that the file is created. The appropriate code for each record type is listed below:

New Case	A
Modified Record	M
Deletion	D

The code for the record type generated by the central registry is:

Shared Follow-Up	S
------------------	---

II.5.4 NAACCR or Central Registry Record Version

This field must contain the version code that identifies which revision of a record layout was used to create a record for the recipient. Once your software system has been modified to transmit records using the latest record layouts in this volume, all records transmitted must include the latest record version code(s), shown parenthetically after the record version data item name in each record layout.

Section II.6 Rules to Computer Generate Data Items for Standard Setting Organizations

The California Cancer Registry is required to submit data to standard-setting organizations. There are a number of data items that are generated for these submissions. These organizations include the North American Association of Central Cancer Registries (NAACCR), NCI’s Surveillance, Epidemiology and End Results Program (SEER) and the Center for Disease Control and Prevention’s National Program of Cancer Registries (NPCR). Please refer to California Cancer Reporting System Standards, Volume III, for specifications for the data items listed below.

II.6.1 Data Items

- COC
- Coding Sys - Current
- COC Coding Sys - Original
- Coding System for EOD
- Computer-Derived Ethnicity (formerly Spanish Surname)
- Computer-Derived Ethnicity Source
- ICD Revision Number
- Industry Source
- Follow-Up Source- Central (Mapped from Last Type of Follow-Up (Patient))
- Morph Coding Sys - Current
- Morph Coding Sys – Original
- Occupation Source
- Race Coding Sys - Current
- Race Coding Sys - Original
- RX Coding System - Current
- SEER Coding Sys - Current
- SEER Coding Sys – Original
- SEER Type of Follow-Up
- SEER Record Number
- Site Coding Sys - Current
- Site Coding Sys – Original
- Census Tr Poverty Indictr
- Surv-Date Active Followup
- Surv-Flag Active Followup
- Surv-Mos Active Followup
- Surv-Date Presumed Alive
- Surv-Flag Presumed Alive
- Surv-Mos Presumed Alive
- Surv-Date DX Recode
- RuralUrban Continuum 2013
- RUCA 2000
- RUCA 2010
- URIC 2000
- URIC 2010
- Vital Status Recode
- Record Number Recode
- SEER Cause Specific COD
- SEER Other COD

Part III Quality Control Standards

Section III.1 2018 Data Conversions

The following database conversions need to be performed as part of the implementation of the 2018 Data Changes. These are specific to meet CA reporting standards and additional radiation conversions will be needed to meet Commission on Cancer (CoC) requirements. Please see the [NAACCR 2018 Implementation Guide](#) for further detailed information.

1. Radiation Conversions: Use the steps below to populate the new radiation fields. Do not delete out any data in the old fields.
 - 1.1. The first step of this conversion is to use FORDS Rad--Regional RX Modality [NAACCR #1570] TO POPULATE STORE Phase I Radiation Treatment Modality [NAACCR #1506], Phase I External Beam Radiation Planning Technique [NAACCR #1502]:

Populate V18 Fields		
FORDS Rad--Regional RX Modality [NAACCR #1570]	STORE Phase I Radiation Treatment Modality [NAACCR #1506]	STORE Phase I External Beam Radiation Planning Technique [NAACCR #1502]
00	00	00
20	01	01
21	02	02
22	02	01
23	02	01
24	02	01
25	02	01
26	02	01
27	02	01
28	04	03
29	01	01
30	05	01
31	02	05
32	01	04
40	03	01
41	02	06
42	02	07
43	02	08
50	07	88
51	08	88
52	09	88
53	10	88
54	11	88
55	13	88
60	13	88
61	15	88
62	16	88
80	99	98
85	99	98
98	99	98

99	99	99
NOT in 00, 20-32, 40-43, 50-55, 60-62, 80, 85, 98, 99, BLANK	99	98
BLANK	BLANK	BLANK

1.2. The step of this conversion is to use FORDS Rad--Boost RX Modality [NAACCR #3200] TO POPULATE STORE Phase II Radiation Treatment Modality [NAACCR #1516], Phase II External Beam Radiation Planning Technique [NAACCR #1512]

	Populate v18 Fields	
FORDS Rad--Boost RX Modality [NAACCR #3200]	STORE Phase II Radiation Treatment Modality [NAACCR #1516]	STORE Phase II External Beam Radiation Planning Technique [NAACCR #1512]
00	00	00
20	01	01
21	02	02
22	02	01
23	02	01
24	02	01
25	02	01
26	02	01
27	02	01
28	04	03
29	01	01
30	05	01
31	02	05
32	01	04
40	03	01
41	02	06
42	02	07
43	02	08
50	07	88
51	08	88
52	09	88
53	10	88
54	11	88
55	13	88
60	13	88
61	15	88
62	16	88
98	99	98
99	99	99
NOT in 00, 20-32, 40-43, 50-55, 60-62, 80, 85, 98, 99, BLANK	99	98
BLANK	BLANK	BLANK

2. ACOS Approved Flag [CCR #E1608] converted to CoC Accredited Flag [NAACCR #2152]

Use the following to populate CoC Accredited Flag:

		Populate v18 Fields
ACOS Approved [CCR #E1608]	Class of Case [NAACCR #610]	COC Accredited Flag [NAACCR #2152]
blank		blank
2		0
1	10-22	1
1	30-43, 99, 00	2
1	NOT 30-43, 99, 00	blank

3. Date Cancer Status [CCR #E1582] should be directly converted to Date of Last Cancer (tumor) Status [NAACCR #1772].
4. Date Cancer Status Flag [CCR #1583] should be directly converted to Date of Last Cancer Status Flag [NAACCR #1773].
5. Over-ride Name Sex [CCR #E1560] should be directly converted to Over-ride Name/Sex [CCR #E1905].

Section III.2 Edits

One method used by the regional registry for insuring data quality is to pass submitted records through computer edits to assess whether coding rules have been properly followed. Two types of computer edits will be applied to New Case Records and Modified Records when they are received: allowable value edits and interfield edits. Allowable Value edits check individual data items for valid codes or other types of allowable values. Interfield edits compare the contents of two or more fields for consistency. These edits are described in Cancer Reporting in California: Standards for Regional Registries and the California Cancer Reporting System Standards, Volume III. This document is available on the [CCR website](#). See Section III.4 in this manual for the acceptance standards.

CCR edits must be run and any edit errors corrected before the creation of a New Case Record or Modified Record submission file. Modified Records will be rejected by the CCR's Eureka database software if they are unable to pass the CCR edits, and the facility will be required to fix the necessary data items prior to the next scheduled monthly transmit. Please see Section II.3.3 for further requirements for the Modified Record.

Section III.3 Acceptance Procedure

III.3.1 Acceptance Standards for Software

Hospitals (and other reporting sources) wishing to develop their own systems for automated reporting to the regional registry, or vendors wishing to market software which meets California Cancer Registry requirements, are required to demonstrate that they have procedures in place to assure the accuracy of the data being collected. In order for another method of automated reporting to be accepted for reporting to the California Cancer Registry and its regional registries, the hospital or vendor must demonstrate the following:

1. Data must conform to the specifications described in this document.
2. Software must allow all valid values in data item fields.
3. All records must pass the allowable value edits (California Cancer Reporting System Standards, Volume III).
4. All records must pass the interfield edits (California Cancer Reporting System Standards, Volume III).

A hospital or vendor must demonstrate its ability to meet these standards before its system is accepted and it will be expected to continue to meet these standards. Each time a hospital or vendor changes the registry software (i.e., changes the version) it must again demonstrate its ability to meet these standards.

III.3.2 Test Submission

In order for the California Cancer Registry to determine whether a hospital or vendor meets the above requirements, the hospital or vendor must submit test records of each type for approximately 50 cases, covering one-month, three-months, or six-months; whichever time period is closest to 50 cases. A test file cannot contain only easy cases, but must contain a sample that is representative of the normal caseload. After the submission is evaluated by the California Cancer Registry, the reporting facility or vendor will receive notification of problems detected and what changes, if any, need to be made before the reporting facility's or vendor's software can be accepted for automated reporting.

When Volume II requirements change in such a way that vendor software must be revised, then the vendor must submit additional test files to demonstrate that they meet the new requirements.

Appendices A, B, C, & D (Exchange Records)

[Exchange records. Appendices A, B, C, & D, are presented in spreadsheet format. Click here to open the appendices.](#)