Measuring Cancer Care Quality in California
Measure Specifications

Breast Cancer Measures

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Post Breast Conservation Surgery Irradiation (NQF 0219)

Description

Percentage of female patients, age 18-69, who had their primary diagnosis of invasive tumors of the breast (epithelial malignancy), at AJCC stage I, II, III, and received breast conserving surgery who receive radiation therapy within 365 days of surgery.

Eligible Population - Denominator

Gender	Female
Index Date	Date of the last breast conserving surgery following the date of the primary diagnosis of invasive tumors of the breast
Ages	18 to 69 years as of date of primary diagnosis
Continuous Enrollment	365 days following index date in the plan
Allowable Gap	No more than one gap in enrollment of up to 45 days during the continuous enrollment period

Steps to Identify the Eligible Population

Step 1	From CCR data identify all female members age 18-69 as of date of primary diagnosis with a primary diagnosis of invasive tumors of the breast at Stage I, II, III with the other requirements in Table 0219a.

Table 0219a: CCR Codes to Identify the Eligible Population

Description	CCR Codes
Primary tumors of the breast	SITE_02= C50.0, C50.1, C50.2, C50.3, C50.4, C50.5, C50.6, C50.8, C50.9
AJCC Stage 1, 2,or 3	First character AJCC_C or AJCC_P= 1, 2, or 3
Sex	SEX=2
Primary tumor diagnosis	SEQNOCEN= 00 or 01
Date of Diagnosis	DATEDX
Histology cell type of this tumor: epithelial malignancy only	HISTO_T3=8000-8576, 8940-8950, 8980-8981, 9020
Behavior code –invasive tumors	HISTO_M3=3

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Step 2 Of the women with a qualifying primary diagnosis of invasive tumors of the breast in Step 1, identity those who had breast conserving surgery, Table 219b, after the date of primary diagnosis.

Table 0219b: CCR Codes to Include Women Age 18-69 with Breast Conserving Surgery

Description	CCR Codes
Receipt of Breast Conserving Surgery	SURGPRIM = 20-24
Date of Surgery (Index Date)	SURGDATE following DATEDX and in the PY

Step 3 Using plan enrollment data, retain only the members from step 2 continuously enrolled in the plan for 365 days following their Index Date.

Numerator

Step 4 Identify members in the denominator who received radiation therapy within 365 days of the Index Date. Use Table 0219c, to identify qualifying radiation therapy either though health plan claims data or CCR data. For claims use claim date, for CCR data use RXDATER.

Table 0219c: Codes to identify radiation therapy

Description	Claims Data	CCR
Radiation therapy	CPT radiation oncology codes: 77300, 77315, 77321, 77332, 77333, 77334, 77336, 77413, 77414, 77416, 77417, 77418, 77427. May also include radiation planning codes: 77261, 77262, 77263, 77290, 77295	RADREGMOD=20-98

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Breast Cancer Adjuvant Hormonal Therapy (NQF 0220)

Description

Percentage of female patients, age 18-69, with a primary diagnosis of invasive tumors of the breast (epithelial malignancy), at AJCC Stage I (T1c), or Stage II, or III, whose tumor is progesterone and estrogen receptor positive and who had considered or had administered tamoxifen or third generation aromatase inhibitor (considered or administered) within 365 days of the diagnosis.

Eligible Population - Denominator

Gender	Female
Index Date	Date of the primary diagnosis of invasive tumors of the breast
Ages	18 to 69 years as of date of the primary diagnosis
Continuous Enrollment	365 days following index date in the plan
Allowable Gap	No more than one gap in enrollment of up to 45 days during the continuous enrollment period

Steps to Identify the Eligible Population

Step 1 From CCR data, identify the index date, diagnosis date, for all female members age 18-69 as of date of the primary diagnosis with a primary diagnosis of invasive tumors of the breast and with the other requirements in Table 0220a.

Table 0220a: CCR Codes to Identify the Eligible Population

Description	CCR Codes
Primary tumors of the breast	SITE_02= C50.0, C50.1, C50.2, C50.3, C50.4, C50.5, C50.6, C50.8, C50.9
Sex	SEX=2
Primary tumor diagnosis	SEQNOCEN = 00 or 01
Date of Diagnosis (**index date**)	DATEDX
Histology cell type of this tumor: epithelial malignancy only	HISTO_T3=8000-8576, 8940-8950, 8980-8981, 9020
Behavior code –invasive tumors	HISTO_M3=3
Surgically treated	SURGPRIM = 20-90
AJCC Stage 1	First character of AJCC_C or AJCC_P= 1 and CS_TUM_SIZE= 011-989, 992-995 and NCODE_P = 0, I-,0I-,I+, 0I+, M-,0M-,M+ or 0M+
Or	
AJCC Stage 2 or 3	First character of AJCC_C or AJCC_P= 2 or 3 and NCODE_P = 1,1M,1MI,1A,1B,1C,2,2A,2B,3,3A,3B, or 3C

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Description	CCR Codes
Hormone Receptor Positive	CS_SITE_SPEC_F1 =010 or 030 or _F2= 010 or 030 (CS_SITE_SPEC_F1 =010 or 030 or CS_SITE_SPEC__F2= 010 or 030) and (CS_SITE_SPEC_F1 ne 020 and CS_SITE_SPEC__F2 ne 020)

Step 2 Using plan enrollment data, retain only the members from step 1 continuously enrolled in the plan for 365 days following their Index Date.

Numerator

Step 3 Identify member is in the denominator who had hormonal therapy, considered or administered, within 365 days of the index date. Use Table 0220b to identify qualifying tamoxifen or third generation aromatase inhibitors (anastrzole, letrozole, ememestane) using either claim or CCR data. For CCR, use RXDATEH. For claims, use claim date.

Table 0220b: Codes to identify hormonal therapy

Description	Claims Data	CCR
Hormonal therapy	See "Breast Cancer Hormone Therapy Codes" spreadsheet.	HORMSUM = 01 or (82, 85, 86, 87)

Breast Cancer Hormonal Therapy for Stage IC-IIC (NQF 0387)

Description

Percentage of female patients, age 18-69, with a primary diagnosis of invasive tumors of the breast (epithelial malignancy), at AJCC Stage IC through IIIC whose tumor is progesterone and estrogen receptor positive and who was prescribed tamoxifen or aromatase inhibitor within 365 days of first diagnosis.

Eligible Population - Denominator

Gender	Female
Index Date	Date of the primary diagnosis of invasive tumors of the breast
Age	18 to 69 years as of date of primary diagnosis
Continuous Enrollment	365 days following index date in the plan
Allowable gap	No more than one gap in enrollment of up to 45 days during the continuous enrollment period

Steps to Identify the Eligible Population

Step 1 From CCR data identify the index date (primary diagnosis date) for all female members age 18-69 as of 12/31 of the measurement year with a primary diagnosis of invasive tumors of the breast and with the other requirements in 0387a.

Table 387a: CCR Codes to Identify Members of the Denominator

Description	CCR Codes
Primary tumors of the breast	SITE_02= C50.0, C50.1, C50.2, C50.3, C50.4, C50.5, C50.6, C50.8, C50.9
Sex	SEX=2
Primary tumor diagnosis	SEQNOCEN = 00 or 01
Date of Diagnosis (**index date**)	DATEDX
Histology cell type of this tumor: epithelial malignancy only	HISTO_T3=8000-8576, 8940-8950, 8980-8981, 9020
Behavior code –invasive tumors	HISTO_M3=3
AJCC Stage IC to IIIC	AJCC_C or AJCC_P= I and CS_TUM_SIZE= 011-989,992-995 and NCODE_P = 0,1-,01-,1+, M-, 0M-, M+ or 0M+ **or** AJCC_C or AJCC_P = II or III
Hormone Receptor Positive	CS_SITE_SPEC_F1=10 or 30 or _F2= 10 or 30

Step 2 Using plan enrollment data, retain only the members from step 1 continuously enrolled for 365 days following their index date.

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Numerator

Step 3

Identify members in the denominator who were dispensed a tamoxifen or aromatase inhibitor (anastrozole, letrozole, exemestane) prescription within 365 days of the index date or who had a prescription active on the index date. Use plan claim data or CCR data. For claims use claim date, for CCR data use RXDATEH.

Table 0387b: Codes to identify tamoxifin or aromatase inhibitors

Description	Claims Data	CCR
Prescription	Tamoxifen or aromatase inhibitor NDCs identified as through "Breast Cancer Hormone Therapy Codes.xls" spreadhseet. Aromatase inhibitors are: Anastrozole, Exemestane and Letrozole.	HORMSUM=01

Table 0387c: Codes to identify exclusions

Description	CCR	Time Frame
Medical or System reason for not prescribing (contraindicated)	HORMSUM=82 and RXDATEH	between indexdate and indexdate+30
Receiving gonadotropin,	None	between indexdate and indexdate+365
Receiving radiation or chemo	(RADREGMOD= 20-32, 40-43, 50- 55, 60-62, 98 and RXDATER) or (CHEMOSUM = 03) and RXDATEC	between indexdate and indexdate+365
Received oophorectomy	None	Prior to indexdate
Patient refusal	HORMSUM=87 and RXDATEH	between indexdate and indexdate+365

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Breast Cancer Combination Chemotherapy (NQF 0559)

Description

Percentage of female patients, age 18-69, with a primary diagnosis of invasive tumors of the breast (epithelial malignancy), at AJCC Stage I(T1c), II or III who´s tumor is progesterone and estrogen receptor negative and who was recommended for multi-agent chemotherapy (considered or administered) within 120 days of diagnosis.

Eligible Population - Denominator

Gender	Female
Index Date	Date of the primary diagnosis of invasive tumors of the breast
Ages	18 to 69 years as of date of the primary diagnosis
Continuous Enrollment	120 days following index date in the plan
Allowable Gap	None

Steps to Identify the Eligible Population

Step 1 From CCR data identify the index date (primary diagnosis date), for all female members age 18-69 as of date of the primary diagnosis with invasive tumors of the breast and with the other requirements in Table 0559a.

Table 0559a: CCR Codes to Identify the Eligible Population

Description	CCR Codes
Primary tumors of the breast	SITE_02= C50.0, C50.1, C50.2, C50.3, C50.4, C50.5, C50.6, C50.8, C50.9
Sex	SEX=2
Age	AGE=18-69 as of diagnosis
Primary tumor diagnosis	SEQNOCEN = 00 or 01
Date of Diagnosis (**index date**)	DATEDX
Histology cell type of this tumor: epithelial malignancy only	HISTO_T3=8000-8576, 8940-8950, 8980-8981, 9020
Behavior code –invasive tumors	HISTO_M3=3
AJCC Stage 1 T1c	First character of AJCC_C or AJCC_P= 1 and CS_TUM_SIZE= 011-989,992-995 and NCODE_P = 0, I-,0I-, I+, M-,0M-, M+ or 0M+
OR	OR
AJCC Stage 2, or 3	First character of AJCC_C or AJCC_P= 2 or 3 and NCODE_P=1,1M,1MI,1A,1B,1C,2,2A,2B,3,3A,3B, or 3C
Hormone Receptor Negative	(CS_SITE_SPEC_F1 =20 and _F2= 20 or 30) or (CS_SITE_SPEC_F1 =30 and _F2= 20)

Step 2 Using plan enrollment data, retain only the members from step 1 continuously enrolled in the plan for 120 days following their Index Date.

Numerator

Step 2

Identify members in the denominator who received combination chemotherapy, considered or administered, per Table 0559b, initiated (RXDATEC) within 120 days of the index date. At least two of the chemotherapy agents must be administered or considered within 14 days of each other. Note that the CCR data indicates whether a chemotherapy agent was considered. The claims data does not provide this information. Use plan claim data or CCR data.

Table 0559b: Codes to identify combination chemotherapy

Description	Claims Data	CCR
Combination Chemotherapy	Any two or more different chemotherapy agents contained in the "Breast Cancer Chemo Codes" spreadsheet	CHEMOSUM = 03 or (82,85, 86, 87)

Breast Cancer, Negative HER2, No Trastuzumab (NQF 1857)

Description

Percentage of female patients, age 18-69, with a primary diagnosis of invasive tumors of the breast (epithelial malignancy), at AJCC Stage I (T1c), II or III whose tumor is human epidermal growth factor receptor 2 (HER2/neu) negative or undocumented for HER2/neu and whose initial course of treatment is not trastuzumab (in 120 days following date of primary diagnosis).

Eligible Population - Denominator

Gender	Female
Index Date	Date of the primary diagnosis of invasive tumors of the breast
Age	18 to 69 years as of date of the primary diagnosis
Continuous Enrollment	120 days following index date in the plan
Allowable Gap	None

Steps to Identify the Eligible Population

Step 1 From CCR data identify the index date (DATEDX) for all female members age 18-69 as of date of the primary diagnosis with invasive tumors of the breast and with the other requirements in Table 1857a.

Table 1857a: CCR Codes to Identify the Eligible Population

Description	CCR Codes
Primary tumors of the breast	SITE_02= C50.0, C50.1, C50.2, C50.3, C50.4, C50.5, C50.6, C50.8, C50.9
Sex	SEX=2
Primary tumor diagnosis	SEQNOCEN = 00 or 01
Date of Diagnosis (**index date**)	DATEDX
Histology cell type of this tumor: epithelial malignancy only	HISTO_T3=8000-8576, 8940-8950, 8980-8981, 9020
Behavior code –invasive tumors	HISTO_M3=3
AJCC Stage 1(T1c)	First character of AJCC_C or AJCC_P= 1 and CS_TUM_SIZE= 011-989, 992-995 and NCODE_P = 0, I-,0I-, I+, 0I+, M-,0M-, M+ or 0M+
OR	OR
AJCC Stage 2, or 3	First character of AJCC_C or AJCC_P= 2 or 3 and NCODE_P = 1,1M,1M1,1A,1B,1C,2,2A,2B,3,3A,3B, or 3C
Hormone Receptor Negative	(CS_SITE_SPEC_F1 =20 and _F2= 20 or 30) or (CS_SITE_SPEC_F1 =30 and _F2= 20).

Step 2 Using plan enrollment data, retain only the members from step 1 continuously enrolled in the plan for 120 days following their Index Date.

Numerator

Identify members in the denominator who were not dispensed trastuzumab within 120 days of the index date. Use plan claim data.

Table 1857b: Codes to identify treatment

Description	Claims	CCR
Trastuzumab	HCPCS: J9355	None.

Human Epidermal Growth Factor Receptor 2 (HER2) Testing in Breast Cancer (NQF 1878)

Description

Percentage of female patients, age 18-69, with a primary diagnosis of invasive tumors of the breast (epithelial malignancy), at AJCC Stage I, II or III or IV who are tested for human epidermal growth factor receptor 2 (HER2/neu) within 90 days of the index date.

Eligible Population - Denominator

Gender	Female
Index Date	Date of the primary diagnosis of invasive tumors of the breast
Age	18 to 69 years as of date of the primary diagnosis
Continuous Enrollment	90 days following index date in the plan
Allowable Gap	None

Steps to Identify the Eligible Population

Step 1 From CCR data identify the index date (primary diagnosis date), for all female members age 18-69 as of date of the primary diagnosis with invasive tumors of the breast and with the other requirements in Table 01878a.

Table 1878a: CCR Codes to Identify the Eligible Population

Description	CCR Codes
Primary tumors of the breast	SITE_02= C50.0, C50.1, C50.2, C50.3, C50.4, C50.5, C50.6, C50.8, C50.9
Sex	SEX=2
Primary tumor diagnosis	SEQNOCEN = 00 or 01
Date of Diagnosis (**index date**)	DATEDX
Histology cell type of this tumor: epithelial malignancy only	HISTO_T3=8000-8576, 8940-8950, 8980-8981, 9020
Behavior code –invasive tumors	HISTO_M3=3
AJCC Stage 1, 2, 3, 4	First character of AJCC_C or AJCC_P= 1, 2, 3, or 4

Step 2 Using plan enrollment data, retain only the members from step 1 continuously enrolled in the plan for 90 days following their Index Date.

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Numerator

Step 3 Identify members in the denominator who received HER2/neu testing within 90 days of the index date. Use Table 1878b to identify qualified HER2/neu tests. For health plan claims data use claim date.

Table 1878b: Codes to identify the test

Description	Claims Data
HER2/neu test	CPT 83950, 88271, 88272, 88273, 88274, 88275, 88342, 88343, 88360, 88361, 88365, 88367, 88368, 3394F, HCPCS G0461, G0462

Adjuvant Chemotherapy for Colon Cancer (NQF 0223)

Description

Percentage of patients, age 18-79, with a primary diagnosis of colon cancer, at AJCC Stage III, for whom adjuvant chemotherapy is recommended or administered within 120 days of diagnosis.

Eligible Population - Denominator

Index Date Primary diagnosis date

Ages 18 to 79 years as of primary diagnosis date

Continuous Enrollment 120 days following index date in the plan

Allowable Gap None

Steps to Identify the Eligible Population

Step 1 From CCR data, identify the index date (primary diagnosis date) for all members age 18-79 as of primary diagnosis date with colon cancer and with the other requirements in Table 0223a.

Table 0223a: CCR Codes to select members Age 18-79 with Stage 3 Colon Cancer

Description	CCR Codes
Colon cancer	SITE_02= C18.0, C18.2, C18.3, C18.4, C18.5, C18.6, C18.7, C18.8, C18.9
AJCC Stage 3	First character of AJCC_C or AJCC_P= 3
Primary diagnosis	SEQNOCEN= 00 or 01
Date of primary diagnosis (**index date**)	DATEDX
Histology cell type of this tumor: epithelial malignancy only	HISTO_T3=8000-8152, 8154-8231, 8243-8245, 8247-8248, 8250-8576, 8940-8950, 8980-8981
Behavior code –invasive tumors	HISTO_M3=3
Surgically treated	SURGPRIM= >30 and <=90
Regional node positive	PNODETU = 01-90, 95 or 97

Step 2 Using plan enrollment data, retain only the members from step 1 continuously enrolled in the plan for 120 days following their Index Date.

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Numerator

Step 4 Identify members in the denominator who had considered or administered qualifying chemotherapy within 120 days of the index date. Use Table 0223b to identify qualifying chemotherapy therapy either though health plan claims data or CCR data. For claims use claim date, for CCR data use RXDATEC.

Table 0223b: Codes to identify chemotherapy

Description	Claims Data	CCR
Chemotherapy	HCPCS: C9205, C9214, J0640, J0641, J8520, J8521, J9035, J9190, J9206, J9263, S0116 NDC: 00004-1101-16 00004-1100-20 00004-1100-51 00004-1101-50 00004-1101-75 54569-5717-00 54868-4143-00 54868-4143-01 54868-4143-02 54868-4143-03 54868-5260-00 54868-5260-01 54868-5260-02 54868-5260-03 54868-5260-04 54868-5260-05 54868-5260-06 54868-5260-07 54868-5260-08 54868-5260-09	CHEMOSUM=01, 02, 03, 82, 85, 86, 87

Note: CHEMOSUM values are:

00: None, diagnosed at autopsy

01: Chemotherapy, NOS

02: Single agent

03: Multiple agents

82: Contraindicated

85: Patient died

86: Recommended, not given

87: Refused

88: Recommended, unknown if given

99: Unknown or death certificate only case (DCO)

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Twelve Node Examination for Resected Colon Cancer (NQF 0225)

Description

Percentage of patients, age 18-79, with a primary diagnosis of colon cancer at AJCC Stage I, II or III who have 12 regional lymph nodes removed and pathologically examined for resected colon cancer within 120 days of primary diagnosis.

Eligible Population - Denominator

Index Date Primary diagnosis date

Ages 18 to 79 years as of primary diagnosis date

Continuous Enrollment 120 days following index date in the plan

Allowable Gap None

Steps to Identify the Eligible Population

Step 1 From CCR data identify the index date, primary diagnosis date, for all members age 18-79 as of primary diagnosis date with colon cancer and with the other requirements in Table 0225a.

Table 0225a: CCR Codes to select members Age 18-79 with Stage 1, 2, or 3 Colon Cancer

Description	CCR Codes
Colon cancer	SITE_02= C18.0, C18.2, C18.3, C18.4, C18.5, C18.6, C18.7, C18.8, C18.9
AJCC Stage 1, 2, 3	First character of AJCC_C or AJCC_P= 1, 2, or 3
primary diagnosis	SEQNOCEN= 00 or 01
Date of primary diagnosis (**index date**)	DATEDX
Histology cell type of this tumor: epithelial malignancy only	HISTO_T3=8000-8152, 8154-8231, 8243-8245, 8247-8248, 8250,-8576, 8940-8950, 8980-8981
Behavior code –invasive tumors	HISTO_M3=3
Surgically resection performed	SURGPRIM= >30 and <=80

Step 2 Using plan enrollment data, retain only the members from step 1 continuously enrolled in the plan for 120 days following their Index Date.

Numerator

12 or more regional lymph nodes removed and pathologically examined for resected colon cancer within 120 days of the index date. Use CCR data.

Table 0225b: Codes to identify removal and examination

Description	Claims Data	CCR
12 or more regional lymph nodes pathologically examined	none	PNODETU =12-90

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KRAS Gene Mutation Test for Colon Cancer (NQF 1859)

Description

Percentage of patients, age 18-79, with a primary diagnosis of colon cancer at AJCC Stage IV for whom KRAS gene mutation testing was performed prior to receiving anti-epidermal growth factor receptor monoclonal antibody therapy (anti-EFGR MoAb).

Note: NQF specification covers colorectal cancer. This specification is limited to colon cancer.

Eligible Population - Denominator

Index Date	Date of anti-EFGR MoAb initiation
Ages	18 to 79 years as of date of diagnosis
Continuous Enrollment	Between the date of diagnosis and the index date in the plan
Allowable Gap	None

Steps to Identify the Eligible Population

Step 1

From CCR data identify all members age 18-79 as of date of diagnosis with a primary diagnosis of colorectal cancer and with the other requirements in Table 1859a.

Table 1859a: CCR Codes to select members Age 18-79 with Stage 4 Colorectal Cancer

Description	CCR Codes
Colon cancer	SITE_02= C18.0, C18.2, C18.3, C18.4, C18.5, C18.6, C18.7, C18.8, C18.9
AJCC Stage 4	First character of AJCC_C or AJCC_P= 4
Primary diagnosis	SEQNOCEN= 00 or 01
Date of primary diagnosis	DATEDX
Histology cell type of this tumor: epithelial malignancy only	HISTO_T3=8000-8152, 8154-8231, 8243-8245, 8247-8248, 8250-8576, 8940-8950, 8980-8981
Behavior code –invasive tumors	HISTO_M3=3

Step 2

From claims data identify the index date, the date of anti-EFGR MoAb therapy for those members from step 1. Use Table 1859b to identify qualifying anti-EFGR MoAb therapy.

Retain only those members with an index date.

Table 1859b: Codes to select members Anti-EFGR monoclonal antibody therapy

Description	HCPCS Codes	CCR
Anti-EFGR MoAb Therapy	J9055, C9215, J9303, C9235 (cetuximab and panitumumab)	CCR to determine if code available.

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Step 3 Using plan enrollment data, retain only the members from step 2 continuously enrolled in the plan between the date of primary diagnosis and before the Index Date.

Numerator

Step 4 Identify members in the denominator who received KRAS gene mutation testing after the date of diagnosis but before the index date (i.e., date of start of anti-EGFR MoAb therapy). Use plan claim data. For claims use claim date.

Table 1859c: Codes to identify KRAS test

Description	Claims Data
KRAS Test	CPT 81210, 81275, 81403, 83891, 83904, 83912, 88363, HCPCS S3713