11/20/2013

# Consensus Procedures for Extracts and Use of Registry Plus Regarding 2013-14 Data Quality Evaluation Procedures

## Extracts

Each central cancer registry included in the NPCR DQE will extract and transmit to Westat two data sets formatted according to the NAACCR Standard Layout version 13. The data sets will be referred to as Extract 1- Consolidated Records (tumor summaries) and Extract 2 - Abstracts (facility records). Both Extract 1 and Extracts 2 should be uploaded to the DocServer located at [www.npcr-dqe-docserver.com](http://www.npcr-dqe-docserver.com) by December 6, 2013.

Procedure for the extraction of Extract 1 - Consolidated Records file:

Consolidated records should be selected from the registry consolidated records tables (e.g, ‘medicalsum’ and ‘patient’ tables in the Registry Plus system). For the Extract 1 file, select all consolidated records that satisfy all conditions listed below:

1) Year of diagnosis =2011 (first four digits of the date of Diagnosis [NAACCR Item # 390] should be 2011)

2) The consolidated record is not based on a death certificate or on an autopsy report only (Type of Reporting Source [NAACCR Item # 500] should NOT be equal to ‘6’ or ‘7’)

3) The behavior of the consolidated tumor should be in situ or malignant: Behavior Code ICD-O-3 [NAACCR Item 523] should be equal to 2 or 3.

4) Exclude consolidated records associated with abstracts that cannot be re-released, such as abstracts received from VA facilities, abstracts received as part of the interstate data exchange process if applicable, or any abstracts with HIPAA restrictions. To achieve this step use a ‘no secondary release’ indicator (if available) or screen the Registry ID [NAACCR Item 40] and/or the Reporting Facility [NAACCR Item 540] fields to eliminate VA facilities and other facilities with restrictions (if technically possible).

5) Site-Histology combination should correspond to one of the following cancer types of interest for the evaluation. In selecting consolidated records by site-histology combination use Primary Site [NAACCR Item 400] and Histologic Type ICD-O-3 [NAACCR Item # 522] and the site-histology combination below:

|  |  |  |
| --- | --- | --- |
| **Cancer Type** | **Primary Site Code** | **Histology** (Behavior 2 or 3) |
| Breast | C500 – C509 | 8000 – 8576; 8940 – 8950; 8980 – 8981; 9020 |
| Colon | C180 – C189, C260 | 8000 – 8152; 8154 – 8231; 8243 – 8245; 8247; 8248; 8250 – 8576; 8940 – 8950; 8980 – 8981 |
| Rectosigmoid Junction | C199 | 8000 – 8152; 8154 – 8231; 8243 – 8245; 8247; 8248; 8250 – 8576; 8940 – 8950; 8980 – 8981 |
| Rectum | C209 | 8000 – 8152; 8154 – 8231; 8243 – 8245; 8247; 8248; 8250 – 8576; 8940 – 8950; 8980 – 8981 |
| Lung | C340 – C349 | 8000 – 8576; 8940 – 8950; 8980 – 8981 |
| Corpus Uteri | C540 – C549, C559 | 8000 – 8790; 8950; 8951; 8980 – 8981 |
| Prostate | C619 | 8000 – 8110; 8140 – 8576; 8940 – 8950; 8980 – 8981 |

6) Each consolidated tumor selected for inclusion in Extract 1 should be defined by a unique combination of Patient ID Number and Sequence Number Central. Some registry systems may use a specific key (in parallel with the Patient ID Number and Sequence Number Central combination) to link the consolidated records with facility abstracts. For example, the Registry Plus system uses the ‘medrefid’ key. Westat encourages registries to provide the key they customarily use to identify consolidated records. Registries will need to indicate the location of the key in the Extract 1 file.

7) The extract 1 file should include the following standard NAACCR items for each consolidated tumor that qualifies according to the above-listed selection criteria.

### Table 1: Items in Extract of Consolidated Records *(NAACCR references from Volume II)*

| **NAACCR Item Number** | **NAACCR Item Name** | **Column #** | **DQE evaluators will review for the specified sites. No need for CCR to filter for extract.** |
| --- | --- | --- | --- |
| Non-NAACCR | Key Indicator (MedRefID) |  |  |
| 20 | Patient ID Number | 42-49 |  |
| 220 | Sex | 192-192 | Breast cases only |
| 380 | Sequence Number--Central | 528-529 |  |
| 390 | Date of Diagnosis | 530-537 |  |
| 400 | Primary Site | 540-543 |  |
| 410 | Laterality | 544-544 |  |
| 440 | Grade | 555-555 |  |
| 522 | Histologic Type ICD-O-3 | 550-553 |  |
| 523 | Behavior Code ICD-O-3 | 554-554 |  |
| 820 | Regional Nodes Positive | 914-915 |  |
| 830 | Regional Nodes Examined | 916-917 |  |
| 1200 | RX Date – Surgery | 1456-1463 |  |
| 1201 | RX Date — Surgery Flag | 1464-1465 |  |
| 1210 | RX Date—Radiation | 1486-1493 | Breast and Rectum cases only |
| 1211 | RX Date—Radiation Flag | 1494-1495 | Breast and Rectum cases only |
| 1220 | RX Date—Chemo | 1516-1523 | Colon and Breast cases only |
| 1221 | RX Date—Chemo Flag | 1524-1525 | Colon and Breast cases only |
| 1230 | RX Date—Hormone | 1526-1533 | Breast cases only |
| 1231 | RX Date—Hormone Flag | 1534-1535 | Breast cases only |
| 1240 | RX Date — BRM | 1536-1543 |  |
| 1241 | RX Date — BRM Flag | 1544-1545 |  |
| 1250 | RX Date — Other | 1546-1553 |  |
| 1251 | RX Date — Other Flag | 1554-1555 |  |
| 1260 | Date of Initial RX--SEER | 1436-1443 | Either 1260 or 1270 must be included |
| 1261 | Date of Initial Rx-SEER Flag | 1444-1445 | Either 1261 or 1271 would be filled in as needed. |
| 1270 | Date of 1st Crs RX--CoC | 1446-1453 | Either 1260 or 1270 must be included |
| 1271 | Date of 1st Crs RX—CoC Flag | 1454-1455 | Either 1261 or 1271 would be filled in as needed. |
| 1280 | RX Date—DX/Stg Proc | 1556-1563 |  |
| 1281 | RX Date—DX/Stg Proc Flag | 1564-1565 |  |
| 1290 | RX Summ—Surg Prim Site | 1567-1568 |  |
| 1292 | RX Summ—Scope Reg LN Sur | 1569-1569 |  |
| 1294 | RX Summ—Surg Other Reg/Dis | 1570-1570 |  |
| 1350 | RX Summ – Dx/Stg Proc | 1577-1578 |  |
| 1380 | RX Summ—Surg/Rad Seq | 1582-1582 | Breast and Rectum cases only |
| 1390 | RX Summ—Chemo | 1585-1586 |  |
| 1400 | RX Summ—Hormone | 1587-1588 |  |
| 1410 | RX Summ--BRM | 1589-1590 |  |
| 1420 | RX Summ--Other | 1591-1591 |  |
| 1570 | Rad—Regional RX Modality | 1607-1608 |  |
| 2800 | CS Tumor Size | 985-987 | Colon and Breast cases only |
| 2810 | CS Extension | 988-990 |  |
| 2820 | CS Tumor Size/Ext Eval | 991-991 |  |
| 2830 | CS Lymph Nodes | 992-994 |  |
| 2850 | CS Mets at DX | 996-997 |  |
| 2862 | CS Site-Specific Factor 8 | 1024-1026 | Breast cases only |
| 2863 | CS Site-Specific Factor 9 | 1027-1029 | Breast cases only |
| 2864 | CS site-Specific Factor 10 | 1030-1032 | Breast cases only |
| 2865 | CS Site-Specific Factor 11 | 1033-1035 | Breast cases only |
| 2866 | CS Site-Specific Factor 12 | 1036-1038 | Breast cases only |
| 2867 | CS Site-Specific Factor 13 | 1039-1041 | Breast cases only |
| 2868 | CS Site-Specific Factor 14 | 1042-1044 | Breast cases only |
| 2880 | CS Site-Specific Factor 1 | 1003-1005 | Breast cases only |
| 2890 | CS Site-Specific Factor 2 | 1006-1008 | Rectum/Rectosigmoid and Breast cases only |
| 2900 | CS Site-Specific Factor 3 | 1009-1011 | Prostate cases only |
| 3020 | Derived SS2000 | 1156-1156 |  |
| 3250 | RX Summ—Transplnt/Endocr | 1583-1584 |  |

Procedure for the extraction of Extract 2 - Abstracts file:

Abstracts should be selected from the registry abstract-level tables (e.g, ‘abstracts’ tables in the Registry Plus system). For the Extract 2 file, select all abstracts that contribute to (are associated with) the consolidated tumor records selected in Extract 1. This can be achieved by using consolidated tumor key (such as medrefid for Registry Plus users) or the Patient ID Number and Sequence Number Central.

Westat recognizes that this operation, in particular eliminating abstracts not associated with consolidated record tumors listed in extract 1 might be challenging in terms of programming. Therefore, Westat will accept in Extract 2 a listing of all abstracts received by the central cancer registry that satisfy the following conditions:

1) Year of diagnosis =2011, 2012, or 2013 (first four digits of the date of Diagnosis [NAACCR Item # 390] should be 2011, 2012, or 2013).

2) The abstracts have not been received from a VA facility or has other HIPAA restrictions, and was not received as part of the interstate data exchange process (if applicable). To achieve this step use a ‘no secondary release’ indicator (if available) or screen the Registry ID [NAACCR Item 40] and/or the Reporting Facility [NAACCR Item 540] fields to eliminate abstracts from VA facilities and other facilities with restrictions (if technically possible).

If a key indicator (such as medrefid) is provided, Westat will link and retain from Extract 2 only the abstracts that are corresponding to consolidated records in Extract 1. All abstracts submitted as part of Extract 2 should include the data elements listed in table 2. In addition, Westat encourages registries to provide the key they customarily use to link abstracts to consolidated records. Registries will need to indicate the location of the key in the Extract 1 file.

### Table 2: Items in Extract of Abstracts (*NAACCR references from Volume II)*

| **NAACCR Item Number** | **NAACCR Item Name** | **Column #** | **DQE evaluators will review for the specified sites. No need for CCR to filter for extract.** |
| --- | --- | --- | --- |
| Non-NAACCR | Key Indicator (MedRefID) |  |  |
| 20 | Patient ID Number | 42-49 |  |
| 220 | Sex | 192-192 | Breast cases only |
| 380 | Sequence Number--Central | 528-529 |  |
| 390 | Date of Diagnosis | 530-537 |  |
| 400 | Primary Site | 540-543 |  |
| 410 | Laterality | 544-544 |  |
| 440 | Grade | 555-555 |  |
| 522 | Histologic Type ICD-O-3 | 550-553 |  |
| 523 | Behavior Code ICD-O-3 | 554-554 |  |
| 670 | RX Hosp – Surg Prim Site | 782-783 |  |
| 672 | RX Hosp—Scope Reg LN Sur | 784-784 |  |
| 674 | RX Hosp—Surg Other Reg/Dis | 785-785 |  |
| 690 | RX Hosp – Radiation | 789-789 |  |
| 700 | RX Hosp – Chemo | 790-791 |  |
| 710 | RX Hosp – Hormone | 792-793 |  |
| 720 | RX Hosp – BRM | 794-795 |  |
| 730 | RX Hosp - Other | 796-796 |  |
| 740 | RX Hosp – Dx/Stg Proc | 797-798 |  |
| 820 | Regional Nodes Positive | 914-915 |  |
| 830 | Regional Nodes Examined | 916-917 |  |
| 1200 | RX Date – Surgery | 1456-1463 |  |
| 1201 | RX Date — Surgery Flag | 1464-1465 |  |
| 1210 | RX Date—Radiation | 1486-1493 | Breast and Rectum cases only |
| 1211 | RX Date—Radiation Flag | 1494-1495 | Breast and Rectum cases only |
| 1220 | RX Date—Chemo | 1516-1523 | Colon and Breast cases only |
| 1221 | RX Date—Chemo Flag | 1524-1525 | Colon and Breast cases only |
| 1230 | RX Date—Hormone | 1526-1533 | Breast cases only |
| 1231 | RX Date—Hormone Flag | 1534-1535 | Breast cases only |
| 1240 | RX Date — BRM | 1536-1543 |  |
| 1241 | RX Date — BRM Flag | 1544-1545 |  |
| 1250 | RX Date — Other | 1546-1553 |  |
| 1251 | RX Date — Other Flag | 1554-1555 |  |
| 1260 | Date of Initial RX--SEER | 1436-1443 | Either 1260 or 1270 must be included |
| 1261 | Date of Initial Rx-SEER Flag | 1444-1445 | Either 1261 or 1271 would be filled in as needed. |
| 1270 | Date of 1st Crs RX--CoC | 1446-1453 | Either 1260 or 1270 must be included |
| 1271 | Date of 1st Crs RX—CoC Flag | 1454-1455 | Either 1261 or 1271 would be filled in as needed. |
| 1280 | RX Date—DX/Stg Proc | 1556-1563 |  |
| 1281 | RX Date—DX/Stg Proc Flag | 1564-1565 |  |
| 1290 | RX Summ—Surg Prim Site | 1567-1568 |  |
| 1292 | RX Summ—Scope Reg LN Sur | 1569-1569 |  |
| 1294 | RX Summ—Surg Other Reg/Dis | 1570-1570 |  |
| 1350 | RX Summ – Dx/Stg Proc | 1577-1578 |  |
| 1380 | RX Summ—Surg/Rad Seq | 1582-1582 | Breast and Rectum cases only |
| 1390 | RX Summ—Chemo | 1585-1586 |  |
| 1400 | RX Summ—Hormone | 1587-1588 |  |
| 1410 | RX Summ--BRM | 1589-1590 |  |
| 1420 | RX Summ--Other | 1591-1591 |  |
| 1570 | Rad—Regional RX Modality | 1607-1608 |  |
| 2520 | Text—DX Proc--PE | 5565-6564 |  |
| 2530 | Text—DX Proc—X-ray/Scan | 6565-7564 |  |
| 2540 | Text—DX Proc—Scopes | 7565-8564 |  |
| 2550 | Text—DX Proc—Lab Tests | 8565-9564 |  |
| 2560 | Text—DX Proc—Op | 9565-10564 |  |
| 2570 | Text—DX Proc--Path | 10565-11564 |  |
| 2580 | Text—Primary Site Title | 11565-11664 |  |
| 2590 | Text—Histology Title | 11665-11764 |  |
| 2600 | Text—Staging | 11765-12764 |  |
| 2610 | RX Text—Surgery | 12765-13764 |  |
| 2620 | RX Text—Radiation (Beam) | 13765-14764 |  |
| 2630 | RX Text—Radiation Other | 14765-15764 |  |
| 2640 | RX Text—Chemo | 15765-16764 |  |
| 2650 | RX Text—Hormone | 16765-17764 |  |
| 2660 | RX Text—BRM | 17765-18764 |  |
| 2670 | RX Text—Other | 18765-19764 |  |
| 2680 | Text--Remarks | 19765-20764 |  |
| 2800 | CS Tumor Size | 985-987 | Colon and Breast cases only |
| 2810 | CS Extension | 988-990 |  |
| 2820 | CS Tumor Size/Ext Eval | 991-991 |  |
| 2830 | CS Lymph Nodes | 992-994 |  |
| 2850 | CS Mets at DX | 996-997 |  |
| 2862 | CS Site-Specific Factor 8 | 1024-1026 | Breast cases only |
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| 2865 | CS Site-Specific Factor 11 | 1033-1035 | Breast cases only |
| 2866 | CS Site-Specific Factor 12 | 1036-1038 | Breast cases only |
| 2867 | CS Site-Specific Factor 13 | 1039-1041 | Breast cases only |
| 2868 | CS Site-Specific Factor 14 | 1042-1044 | Breast cases only |
| 2880 | CS Site-Specific Factor 1 | 1003-1005 | Breast cases only |
| 2890 | CS Site-Specific Factor 2 | 1006-1008 | Rectum/Rectosigmoid and Breast cases only |
| 2900 | CS Site-Specific Factor 3 | 1009-1011 | Prostate cases only |
| 3020 | Derived SS2000 | 1156-1156 |  |
| 3250 | RX Summ—Transplnt/Endocr | 1583-1584 |  |

We discussed the specifications for the extract files that states will submit at the beginning of the evaluation. We agreed that the year 3 states will create two extract files from their databases and submit them to Westat by December 6, 2013. Extract files must conform to Type A records in the NAACCR format version 13.0.

CDC Use Only

Use of CRS Plus

NEED FOR INSTRUCTIONS FOR CRS DISPLAY TYPE FILE AND ORDER OF DATA FIELDS

We determined that only one instance of CRS Plus would be needed, and we would not need to create a database populated via special import.

The records for each state will be managed in a separate CRS Plus database. We will modify the control table so that only study items are visible to the evaluators, to simplify their work.

The submitted abstracts will be visually edited in Prep Plus. The abstracts for the visual editing part of the evaluation will be batched separately when loaded into Prep Plus. A tracking function in Prep Plus creates a temporary table of changes made to abstracts and then builds a report in text format. If the information in the table is useful to the evaluation, the user can make a copy of the temporary table before it is overwritten.

Westat will determine where the evaluators will record their “Reasons for Recode.” Options include separate Excel file and/or a notes/comments ‘Local Use Text’ area in Prep Plus.

A customized edit set will be created for this evaluation, consisting of a single edit which all records should automatically pass, that is, testing that the Patient ID is not blank or zeros. We determined that an edit set for the consolidated items to be used in CRS Plus was not needed. We determined that a more extensive edit set for Prep Plus was not needed because all submitted records should have had 2011 standard edits applied prior to import.

The Key Indicator, Patient ID, and Sequence Number Central assigned by the state must be carried along with each submitted abstract and not overwritten by CRS Plus. The CDC has a customized CRS Plus with this feature. The CDC also has a customized patient linkage to apply on Patient ID.

All automated consolidation directives in CRS Plus will be turned off for this evaluation, so that consolidation will be manual.

Once the manual consolidation is completed for a state, an extract of consolidated records will be created from CRS Plus. The values will be compared with those in the consolidated records submitted in Extract 1 by the state, using SAS.

## Work Flow for Prep Plus and CRS Plus

The general work flow of abstracts through Prep and CRS Plus will be as follows:

1. Load bundle of abstracts into Prep Plus. Perform visual review of text to code for all the abstracts. All updates to the coded information will be documented in the ‘local use text’ within Prep Plus. All edit reports for each record will be printed to compare with the original data received from the state.
2. Release the bundle. All abstracts will now have an AbsRefID assigned, and will have the state’s Patient ID retained in the record.
3. Load prepped bundle into CRS Plus. The first abstract loaded for any tumor will be written to the Patient, Tumor, and Abstract tables of the database. Subsequent abstracts will match the patient and tumor but will be sent to Pending for consolidation.
4. Evaluator will work through Pending records one by one. Once all abstracts are processed, the values in the Medical Summary table will be the final consolidated values for the case/tumor based on all abstracts.
5. An extract of the consolidated CRS Plus database will be created and compared to the records submitted by the state. An Access database will be created for the states to review and document their reconciliation activities.