North Carolina
Central Cancer Registry

STANDARDS FOR AUTOMATED REPORTING

In accordance with the
North American Association of Central Cancer Registries
XML Data Exchange Standard Version 23.0
Effective 1/1/2023

September 2022

North Carolina Central Cancer Registry
State Center for Health Statistics
Division of Public Health
Department of Health and Human Services
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Table of Contents

PART I: INTRODUCTION

This document is intended for software vendors responsible for developing automated reporting systems that meet the reporting requirements of the North Carolina Central Cancer Registry (N.C. CCR). It describes the format in which the collected data must be reported, and the quality control checks that must be applied to submitted data. This document comprises software standards, but not the complete standards for correctness of data.

Section I.1: Authority

The Central Cancer Registry is established by North Carolina General Statute Chapter 130A - Article 7. Its administrative rules are codified as North Carolina Administrative Code Title 10A - Chapter 47 SubChapter B.

Section I.2: Summary of Changes for 2023

This document is in accordance with the North American Association of Central Cancer Registries (NAACCR) XML Data Exchange Standard version 23.0 effective for cases diagnosed 1/1/2023. There are changes in data item requirements. Please review all documentation carefully.

I.2.1: Changes to the Data Exchange Standard

The data exchange standard is in XML syntax. Refer to the NAACCR website for more information on this change: https://www.naaccr.org/xml-data-exchange-standard/#Documentation

Effective with v22 (cases diagnosed 1/1/2022 and after), all N.C. CCR registry-specific data items were either moved to the core dictionary or removed from the layout entirely and no longer required. Therefore, a N.C. CCR registry-specific XML User Dictionary for v23 is not necessary.

The N.C. CCR will continue to use the Modified Record (record type M) to transmit data modifications for abstracts already submitted as New Case Records. Refer to Section II.3.3 for more details.

The N.C. CCR data exchange requirements are provided in the Excel document specified below and posted on the N.C. CCR website (https://schs.dph.ncdhhs.gov/units/ccr/). The changes to the New Case and Modified record layouts and the data set for 2023 are described in detail in this Excel document. Refer to the Comments column in the Excel document for a description of the changes. Changes to the record layout and reporting requirement for each data item (for record types A and M) are highlighted.

NC CCR v23 XML Data Exchange Requirements_September 2022.xlsx

I.2.2: Changes to N.C. CCR State-Specific Data Items

The N.C. CCR state-specific data item ***NCNativeAmericanTribeStatus*** was discontinued with v21 (effective 1/1/2021) and removed from all layout and data collection requirements. No further collection of this data item, for any cases, is required.

The following data items have been retired and are no longer required for any cases with v22 (effective 1/1/2022). The four Tobacco Use data items below were replaced with a new Tobacco Use Smoking Status (344) data item and is required for all 2022 and later cases.

Height (9960)
Weight (9961)
Tobacco Use Cigarettes (9965)
Tobacco Use Other Smoke (9966)
Tobacco Use Smokeless (9967)
Tobacco Use NOS (9968)

I.2.3: Data Item Effective Years

The *NC CCR v23 XML Data Exchange Requirements_September 2022.xlsx* document specifies the effective years for data items that have not been collected across all years. An update to a data item marked as required for a modified record (column I) MUST trigger a modified record. In addition, a change must only trigger a modified record if the change occurred in a diagnosis year that the data item was in effect.

Section I.3: Supplementary Documentation

This document does not explain how to collect or code the data to be reported. This document does not describe the valid codes or coding instructions for current or new data items. Detailed instructions for collecting and coding the required data items specified in the record layout can be found in the following documents:

- NAACCR Standards for Cancer Registries, Volume II, Data Standards and Data Dictionary (http://datadictionary.naaccr.org/)
- N.C. CCR Cancer Collection and Reporting Manual (CCARM) (www.schs.state.nc.us/units/ccr/reporting.htm).

PART II: DATA TRANSMISSION STANDARDS

Section II.1: Summary

There are two record types that must be transmitted from the reporting facility to the N.C. CCR each time a submission is conducted: New Case records and Modified records. These record types are described in Section II.3.

Cases should not be transmitted using a format that is earlier than the year that the case is reportable. For example, 2023 cases cannot be submitted in the v22 format.

Section II.2: "N.C. CCR Required" Explanatory Notes

Reporting requirements vary by item and record type. The New Case and Modified record types are described in a separate Excel document, which must be consulted to determine whether a particular item is required. The following key explains the abbreviations used in the "N.C. CCR Requirement" columns in the record layouts:

Yes	Required on all cases. Valid codes, including blank (where allowable), must be used; see CCARM.
Yes (gen)	Required on all cases. 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.
Yes (Sel Yrs)	Required on selected identifiable cases, based on effective diagnosis years (noted in the comments in the Excel document).
Yes (Derived)	Required on all cases based on effective diagnosis years. The facility's registry software must derive the data item value based on a standard algorithm, rather than a user manually entering the data item value.
<blank>	Data item is not required to be collected by the reporting facility and may be left blank. If collected, valid codes must be used, and any edit errors cleared.
CCR	The data item is generated in the N.C. CCR data management system and not required by the reporting facility.
No	Relates to the Modified Record. A "No" in the Modified Record requirements column indicates the data item is required for initial reporting of the New Case Record, but updates MUST NOT trigger an M record.

Section II.3: Transmission Requirements

II.3.1: Selection of Cases

Only cases identified as being reportable according to the CCARM are to be included. A reporting facility may elect to abstract other types of cases to meet local interest; however, these cases are not to be transmitted to the N.C. CCR.

II.3.2: New Case Record

The data exchange standard for the New Case record (record type A, full case abstract) is defined in the following Excel document.

NC CCR v23 XML Data Exchange Requirements_September 2022.xlsx

For every abstract of a reportable case that is completed at the reporting facility, a New Case record must be sent to the N.C. CCR.

II.3.3: Modified Record

The data exchange standard for the Modified record (record type M) is defined in the following Excel document.

NC CCR v23 XML Data Exchange Requirements_September 2022.xlsx

The N.C. CCR requires facilities to use the Modified record type to transmit data modifications for abstracts already submitted as New Case records. It is designed to allow facilities to submit the current version of an abstract, providing the cumulative updates to all fields since the original new case was submitted, rather than sending a separate record for each data item change.

The *Modified Record Requirement* column specifies which data item changes should trigger the creation of a Modified Record. Note that not all data item changes should trigger a Modified Record. Only if the reporting facility changes a data item indicated by “yes” in this column, should a Modified Record be created. In addition, updates to a data item must trigger a modified record only for the years the data item is in effect.

Although only the above criteria will trigger a Modified Record, all data items in the Modified Record will be included in the record sent to the N.C. CCR. A Modified Record will only be generated by the vendor software after an updated field triggered the record as outlined above and 30 days have followed since the initial trigger. This will allow for multiple changes to be sent in the same Modified Record. Vendors will be responsible for tracking this timeline within the software.

Hospital registrars will have these Modified Records generated and included in their transmissions to the N.C. CCR as appropriate. There should not be any additional work effort placed on the hospital registrar in regard to the 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.

II.3.5: Record Type

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

- New Case = A
- Modified Record = M

II.3.6: Record Version

This field identifies the full three-character version number of the record layout. The appropriate code for each record type in v23 format is listed below:

- New Case: NAACCR Record Version = 230
- Modified Record: Version = 230

II.3.7: File Naming Requirements

Facilities are required to submit all files in electronic format to the N.C. CCR's Cancer Registry Web Portal. Each reporting facility has a password protected portal account specific for that facility. File names for transmitted files must conform to the following naming convention (beginning with the date the file was created) to facilitate sorting at the N.C. CCR:

Date of transmission (YYYYMMDD) underscore (_) *plus*
Hospital name (or abbreviation) underscore (_) *plus*
Number of cases

Example: 20230320_Main Hospital_253

In addition, the file description for the file must contain information describing the type of file or the file contents and the number of cases in the file.

Examples: First Quarter 2023 344 cases
Missed cases from 2022 49 cases
2022 Consult-Only Cases 189 cases

II.3.8: Reporting Schedule and Deadlines

Facilities that accession 500 or more cases each year are required to upload at least monthly. Facilities that accession less than 500 cases each year are required to upload at least quarterly but can upload more frequently if desired. All facilities must meet the timeliness requirements specified in the quarterly call for data schedule listed below.

The exception is for incomplete cases. Every attempt should be made to ensure the case is as complete as possible before a case is submitted. Incomplete cases should be reviewed routinely and submitted as soon as the information can be obtained to complete the abstract. Generally, this should not affect most cases.

Cases abstracted in the:	Must be uploaded by:
First quarter	October 1
Second quarter	January 1
Third quarter	April 1
Fourth quarter	July 1

PART III: QUALITY CONTROL STANDARDS

Section III.1: Edits

One method used by the N.C. CCR for ensuring data quality is to pass submitted records through computer edits to assess whether coding rules have been properly followed. Required edits are defined in the N.C. CCR Edit Metafile and must be applied to all cases. All records submitted by reporting facilities must pass all required edits included in the current N.C. CCR Edit Metafile.

The current N.C. CCR Edit Metafile for use with this NAACCR version can be downloaded from the N.C. CCR website at: www.schs.state.nc.us/units/ccr/reporting.htm. The N.C. CCR Edit Metafile has also been uploaded to the NAACCR Clearinghouse.

The edit logic is described in detail in the Standards for Cancer Registries, (Vol. IV) NAACCR Standard Edits documentation. This can be downloaded from the NAACCR website at: https://www.naaccr.org/standard-data-edits/.

Section III.2: Test File Submission

Hospitals, other reporting sources, and vendors that will be submitting data (or supporting submission of data) to the N.C. CCR must demonstrate that they have procedures in place to assure the accuracy of the data being collected. This includes:

1. Data conforms to the specifications previously described in this document.
2. Software allows all valid values in data item fields.
3. All records pass the required edits.

Test files may be requested by the N.C. CCR. When requested, the test file should contain approximately 50 cases and include all cases covering one month, three months, or six months; whichever is closest to 50 cases. The file should contain a sample that is representative of the normal caseload. After the submission is evaluated, the vendor will receive notification of problems detected and what changes, if any, need to be made before the data can be accepted.

PART IV: CONTACT INFORMATION

Vendor Communications and Record Layouts: Melissa.Pearson@dhhs.nc.gov

Edits and Metafiles: Dianna.Stucky@dhhs.nc.gov

User Accounts and Passwords: Facilities should contact their CCR Staff Representative