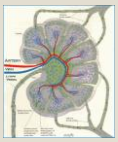
Florida Cancer Data System

2022 FCDS Data Quality Audit
Diagnosis Year 2020 Cases

1

AUDIT RECONCILIATION INSTRUCTIONS

STEVEN PEACE, CTR
3/30/2023



1

FCDS Data Quality Audits

2

- The CDC NPCR requires that all states receiving funding under this program meet all NPCR Program Standards as defined in the NPCR Program Standards 2023-2028.
- These standards are based on authority provided to the CDC under the Public Health Service Act (Title 42, Chapter 6A, Sub-Chapter II, Part M, § 280e) and subsequent amendments, and apply to all reportable cancers as defined in the Act and any amendments.

2

FCDS Data Quality Audits

3

- The Florida Department of Health (Florida DOH) also requires that Florida's statewide central cancer registry, the Florida Cancer Data System (FCDS), must meet all NPCR Program Standards as defined in the NPCR Program Standards 2023-2028.
- FCDS operates the state cancer registry under contract with the Florida DOH.

3

FCDS Data Quality Audits

4

- The quality of data collected and reported by cancer registries depends upon the completeness of case identification, the completeness and accuracy of case reports, on-time reporting of cases, data quality monitoring including editing and record review, and adherence to national program standards (i.e. text documentation).
- At least once every 5 years, a combination of re-casefinding (completeness) and re-abstracting (data validation) audits from a sampling of source documents are conducted for each hospital-based reporting facility in the state of Florida.

4

FCDS Data Quality Audits

5

- Standard: Every Hospital is Audited at least Once Every 5 Years
- In Florida FCDS Audits every hospital every year
  - Every Year Completeness and every 2 years a Data Quality Audit
  - This particular lymphoid/myeloid audit is unique and includes all hospitals in one year diagnosis – to get everybody finished up in one year
- Audits to Assess Completeness of Case Identification
  - AHCA
  - FAPTP
  - E-Billing
  - E-Pathology
  - Vital Statistics
  - Special Studies

FCDS conducts annual re-casefinding audits via discharge diagnosis and procedures index submitted to the state Agency for Health Care Administration (AHCA) for 100% of in-patient encounters and 100% of ambulatory care patient encounters (hospital/non-hospital) occurring in the state of Florida each year.

- Audits to Assess and Validate Data Quality
  - Data Validation
  - Re-Abstract/Re-Code
  - Source Document Verification

5

FCDS Data Quality Audits

6

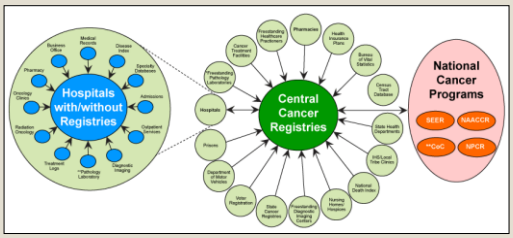
- Examples of Facility-Based Source Documents & Access
  - History and Physical
  - Discharge Summary
  - Operative Report(s)
  - Consultation Report(s)
  - Pathology and Other Lab Report(s)
  - Access to Multiple EMR/EHR System(s)
- Examples of Central Registry Source Documents & Access
  - AHCA Data
  - Abstracted Cases
  - Death Certificates
  - Physician Office Data
  - Electronic Pathology Reports
  - Electronic Copies of Other Primary Documents
  - Remote Access to Electronic Records Systems
  - On-Site Access to Electronic Records Systems


6

FCDS Data Quality Audits

7

Source Documents, Report Sources, and Flow of Information



7

Data Validation with E-Path Verification

8

- Audits may include manual/visual review of one or more source documents, data linkages of one or more electronic files from reporting facilities with the central cancer registry database with a cross-walk and/or comparison of output results.

- This audit has 2 components;
  - **First:** a focused review of analytic urinary system cancer cases diagnosed/treated at the facility with validation (recoding) of data from text only;
  - **Second:** a focused review of e-pathology report(s) from any e-path report source matching hospital registry abstracts with recode of data from pathology report(s).
- Facilities are required to reconcile BOTH data sets for a best code.
- Additional documentation will be required when not available.
- Focus on Histology and Dx Confirmation and Treatment

8

Data Validation with E-Path Verification

9

- This method utilizes FCDS standard visual editing/QC Review procedures to convey review findings targeted to specific cancers.
- NOTE: Text Documentation of specific data items has been both a state and national cancer reporting requirement for two decades with requirements and expectations reinforced via QC Review or personal contact with registrars on a routine basis.
- The CoC is the only Standard Setting Organization that does not require complete text documentation – all other programs require text documentation to support all coded values, particularly FCDS.

9

Text Documentation Required

10

DATA ITEMS REQUIRING COMPLETE TEXT DOCUMENTATION	
Date of DX	
Seq No	ALL Req'd Site Specific Data Items (SSDI)
Sex	
Primary Site – MUST INCLUDE SUBSITE	MUST INCLUDE ANY AND ALL TREATMENT GIVEN AT ANY TX FACILITY
Laterality	RX Summ – Surg Prim Site
Histologic Type	RX Summ – Scope Reg LN Surgery
Behavior Code	RX Summ – Surg Oth Reg/Distant
Grade – Clinical	RX Date – Surgery
Grade – Pathological	Phase I Radiation Treatment Modality
Grade – Post Treatment – Clinical	RX Date – Radiation
Grade – Post Treatment – Pathological	RX Summ – Chemo – include all agents
	RX Date – Chemo
COMPLETE WORKUP INCLUDING DATES	RX Summ – Hormone – include all agents
Imaging, Endoscopys, Labs, Genetics, Path, etc.	RX Date – Hormone
	RX Summ – BRM/Immunotherapy - agents
Summary Stage 2021, Sept 2021 version	RX Date – BRM/Immunotherapy
You may also include AJCC TNM stage	RX Summ – Transplant/Endocrine - details
However, you still must document the	RX Date – Transplant/Endocrine
Rationale for why you assigned SS2018.	RX Summ – Other – include all details
There is no crosswalk from TNM to SS2018.	RX Date - Other
Therefore, it is important BOTH references are	Use the Grade Manual v2.1 for 2022 Cases
included – DO NOT JUST USE TNM IN TEXT.	Use the SSDI Manual v2.1 for 2022 Cases
ALWAYS DOCUMENT WHY THE PATIENT	Include Patient History and Reason for Visit
CAME TO THE FACILITY IN THE FIRST PLACE	Unique or Unusual Characteristics
AND WHY CLASS 32 CASES ARE REPORTED	Specific Statements by Physicians

10

Text Documentation Required

11

Text documentation should always include the following components:

- Date(s) – include date(s) references – event chronology
- Date(s) – note when date(s) are estimated [i.e. Date of DX 3/15/2019 (est.)]
- Location – include facility/physician/other location where the event occurred
- Description – include description of the event – positive/negative results
- Details – include as much detail as possible – document treatment plan
- Include "relevant-to-this-person/cancer" information only – edit your text
- DO NOT REPEAT INFORMATION from section to section
- DO USE Standard Abbreviations (Appendix C)
- DO NOT USE non-standard or stylistic shorthand
- Enter "N/A" or "not available" when no information is available for text.

11

Text Documentation Required

12

12

Text Documentation Required

13


APPENDIX L – 2023 FCDS TEXT DOCUMENTATION REQUIREMENTS

Text Data Item Name NAACCR Item # Field Length	Text Documentation Source and Item Description *FCDS Required Text Documentation – description of the minimum text required for this text field* Example:
Text - Physical Exam H&P NAACCR Item #2920 Field Length = 1000	Enter dates and text information from history and physical exams. *History and physical examination findings that relate to family history or personal history of cancer diagnosis, physical findings on examination, type and duration of symptoms, reason for admission. Every abstract should include a statement as to the reason for the patient encounter at your facility.* Example: Hx RCC RT Kidney – Dx 9/2019 in Georgia. Adm to this facility on 2/1/2020 c/o fever and night sweats. Physical Exam noted enlarged bilateral axillary lymph nodes which on biopsy revealed diffuse large cell B cell lymphoma (DLBCL).
Text - X-rays/Scans NAACCR Item #2930 Field Length = 1000	Enter dates and text information from diagnostic imaging reports; including x-rays, CT, MRI, and PET scans, ultrasound and other imaging studies. Please try to list imaging in chronological order. *Date, facility where procedure was performed, type of procedure, detailed findings (primary site, size of tumor, location of tumor, nodes, metastatic sites), clinical assessment, positive/negative results* Example: 4/12/23 (Breast Center) 3-D Mammo – Rt Breast mass central at 12:00 o'clock 1.3cm size
Text - Scopes NAACCR Item #2940 Field Length = 1000	Enter dates and text information from diagnostic endoscopic examinations. *Date of Procedure, facility where procedure was performed, type of procedure, detailed findings (primary site, extent of tumor spread, satellite lesions), clinical assessment, positive/ negative results* Example: 4/12/23 (Endoscopy Ctr- sp) EGD: gastric mucosa w/ evidence of large tumor occupying half of the stomach. Numerous satellite tumors seen on opposite wall of the stomach
Text - Lab Tests NAACCR Item #2950 Field Length = 1000	Enter dates and text information from diagnostic/prognostic laboratory tests (not cytology or histopathology). Include all relevant laboratory tests whether indicated as an SSDI or as other lab. Include Documentation, Dates and Text for Site Specific Data Items (SSDIs). *Date(s) of Test(s), facility where test was performed, type of test(s), test results (value and assessment)* Example: 4/12/23 (Hosp-sp) ER + ; PR – ; HER2 neg by IHC method, FISH 5.3 (elevated)
Text - Operative Report NAACCR Item #2960 Field Length = 1000	Enter dates and text information from surgical operative reports (not diagnostic needle or incisional biopsy). Include observations at surgery such as tumor size and extent of direct involvement of primary with regional organs or other structures or observed at surgery metastatic sites. *Date of procedure, facility where procedure was performed, type of surgical procedure, detailed surgical findings, documentation of residual tumor, evidence of invasion of surrounding areas* Example: 4/12/23 (Hosp-sp) right colon resection - Pt was found to have extensive disease in the pelvis (carcinomatosis) and resection was aborted, no biopsies were taken, no specimen obtained.
GI Text - Pathology NAACCR Item #2970 Field Length = 1000	Enter dates and detailed text information from final diagnosis on cytology and histopathology reports *Date of specimen/resection, facility where specimen examined, pathology accession #, type of specimen, final diagnosis, comments, addenda, supplemental information, histology, behavior, size of tumor, tumor extension, lymph nodes (removed/biopsied), margins, molecular pathology, genetics)* Example: 3/9/19 (Hosp-sp) – Path Acc # - Rectum: Final Dx: adenoca, 3.4cm, Ant. ½ particle Tab. 1/22 lymph nodes + , margins neg. S100 stain is positive (melanoma, sarcoma), pT3aN1b (M0)

13

Data Validation with E-Path Verification

14

- Barriers and Limitations to Old Methodology
  - Access to ALL Electronic Medical Record Systems increasingly difficult
  - Not transferrable to non-hospital/free-standing tx center situation
  - Did not take full advantage of available e-data resources
  - Cannot find Florida CTR Auditors willing to travel
  - Cost of travel and time away from work
  - Data Security increasing daily

- Data Validation, Recode Audit and E-Path Verification Method intended to maximize available resources (people, time, travel) and utilize existing readily available "source" documents submitted by pathology labs (path reports) and hospitals (abstracts) across the state of Florida. Review of text and recoding of key data items will validate coded data and review text for compliance with FCDS Reporting Requirements with comparison of source abstracts and electronic pathology reports from across the state of Florida.

14

Data Validation with E-Path Verification

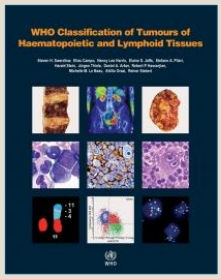
15

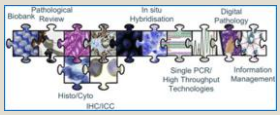
- Objectives:
  - Identify discrepancies in the interpretation and use of national standard abstracting and coding rules and instructions,
  - Identify discrepancies in the interpretation and application of information available in patient records and what is recorded in the text documentation of the abstract,
  - Assess the validity and completeness of text, codes and text-supported codes provided to FCDS as part of routine submissions,
  - Assess the validity of data submitted when original source abstract codes (and text) are compared to e-pathology coded data (and text).

15

Hematolymphoid Neoplasms

16





16

Hematolymphoid Neoplasms

17

1. Did the patient have one or more of the following tests performed on blood, lymph, bone marrow or tissue biopsy/resection (traditional microscopic anatomic pathology)? (Click 'More Info' to see a list of possible tests)
   - Immunophenotype
     - Flow cytometry for cluster of designation or CD marker analysis,
     - IHC (immunohistochemistry) for CD marker analysis,
     - PCR testing (polymerase chain reaction) for CD marker analysis,
   - Molecular pathology studies to analyze DNA or other genetic material using;
     - Single gene test,
     - Genetic panel test,
     - Multi-gene panel test,
     - DNA Microarray,
     - Biomolecular marker(s),
     - FISH (fluorescent in-situ hybridization),
     - Other Immunofluorescence testing,
     - Next-generation sequencing (NGS) gene panel, or
     - Other DNA/RNA/gene testing

2. Did any of the additional test results; confirm the diagnosis, clarify the type of neoplasm (histologic type or subtype), or identify a target drug or specific biological, molecular or immunotherapy (BRM)?

17

Eligibility

18

- Facilities selected – 176 Facilities (originally planned to review 2000 cases)
- Case Selection had to be reduced to: 750 Abstracts/536 E-pathology
  - Date of Diagnosis = 01/01/2020-12/31/2020
  - Primary Site = Any
  - Behavior = 3 (malignant)
  - Central Sequence = 00 (only 1 cancer ever reported)
  - ICD-O-3 Histology = 9590-9993
  - Class of Case = 10, 11, 12, 13, 14, 20, 21, 22 (hospital analytic – dx/tx at facility)
- Selection includes at least 1 "analytic" Hematolymphoid Neoplasms
- Selection may include from 1 to 40 "analytic" Hematolymphoid Abstracts
  - Many Facilities will have 5 or less cases
  - Only 7 Facilities will have more than 10 cases
- E-path Selection may include from 1-36 e-pathology reports (1 or more per case)
- Pathology Selection was based on any e-pathology report(s) with Date of Specimen within 30 days of the original Date of Diagnosis (plus or minus 30 days).

18

Abstracted Items & Text/Values Included

19

Data Items to be included in Data Validation of Abstracted Case (completeness of text documentation and accuracy of coded data including adherence to standard coding rules) – abstract text-to-code validation

Item Name	Item #
NOTE: Add Gender, DOB, Beh, Laterality to assign Schema ID	
Cancer Diagnosis Information	
Diagnostic Confirmation	490
Date of Diagnosis	390
Primary Site	400
Histologic Type	522
Stage of Disease Information	
Directly Assigned SS2018	764
Treatment Information	
Rx Summ – Surg Prim Site	
Rx Summ – Scope Reg LN Surgery	
Rx Summ – Surg Oth Reg/Distant	
Phase I Radiation Treatment Modality	1506
Rx Summ – Chemotherapy	1390
Rx Summ – Hormone	1400
Rx Summ – BRM	1410
Rx Summ – Other	1420
Rx Summ – Transplant/Endocrine	3250
Text Documentation	
All Text Fields Related to Above Data Items	

This audit is primarily focused on examining the registrar's assessment, application and use of histology coding rules and instructions for lymphoid and myeloid neoplasms. These neoplasms require an external reference to correctly code the histology and to correctly assign stage for most cases. Lack of use or not understanding the key references will result in incorrect/inaccurate/ inconsistent/incomplete histology coding and stage assignment.

The SEER Hematopoietic and Lymphoid Neoplasm Database, Hematopoietic Coding Manual, and Hematopoietic DX Confirmation Instructions are the key national reference for this audit.

- Data Items to be included in Data Validation of E-Pathology Text (accuracy) – e-path text-to-code validation
- All Items are to be coded "AS AVAILABLE" and will be used to inform facility that more information was available at the time they abstracted the case. Path data will be evaluated separately from abstracted data.

Item Name – AS AVAILABLE	Item #
NOTE: Add Gender, DOB, Beh, Laterality to assign Schema ID	
Cancer Diagnosis Information	
Date of Diagnosis	390
Diagnostic Confirmation	490
Primary Site	400
Histologic Type	522

Auditor Instructions

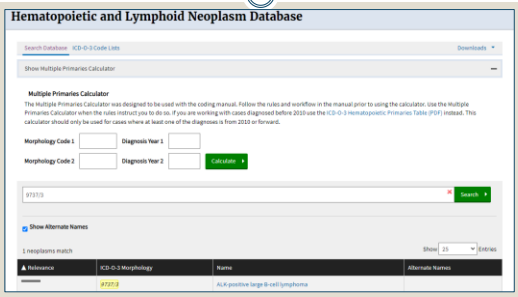
20

- Text-To-Code Validation
  - Only Original Text from the Abstract will be used to assign codes
  - Auditor will not be able to view any of the original codes
  - Auditor will code unknown/not available if no text
  - Auditors MUST use the Heme Manual & DB
  - Dates must be included in text fields
  - Standard abbreviations only
  - Auditor blinded to facility
  - Auditor blinded to case
  - Auditor may add notes

- E-Path Re-Code Verification
  - Only Original Text from Pathology Report will be used to assign codes
  - Auditor will not be able to see any original codes
  - It is possible no pathology report is available
  - Auditor may add notes

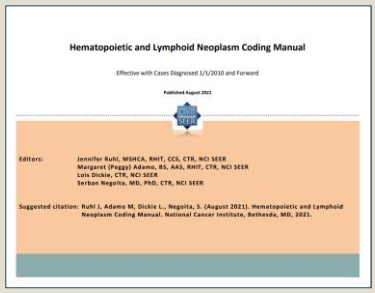
Auditor Instructions – MUST USE

21



Auditor Instructions – MUST USE

22



Auditor Instructions – MUST USE

23

Genetics Data

CLTC-ALK fusion gene
Immunoglobulin genes are clonally rearranged
Phospho-STAT3
SQSTM1 or SEC31A fusion
t(2;17)(p23;q23)

Immunophenotyping

ALK protein positive
CD3-
CD20-
CD30-
CD45 weak or negative
CD79a-
CD138+
CLTC-ALK fusion protein expression
Cytoplasmic staining with other ALK translocations
EMA
IRF4/MUM1 positive

Codes for Hematopoietic and Lymphoid Neoplasms (9590/3-9989/3)

Microscopically Confirmed

Code	Description
1	Positive histology • Includes: peripheral blood smear only
2	Positive cytology
3	Positive histology PLUS: • Positive immunophenotyping AND/OR • Positive genetic studies • Includes: peripheral blood smear followed by flow cytometry *(Effective for cases diagnosed 1/1/2010 and later)*
4	Positive microscopic confirmation, method not specified

Code 3: Positive histology PLUS positive immunophenotyping or genetic testing
Code 3 can be used for cases diagnosed **2010+** with histologic confirmation (see code 1) **AND** immunophenotyping, genetic testing, or JAK2 confirmation

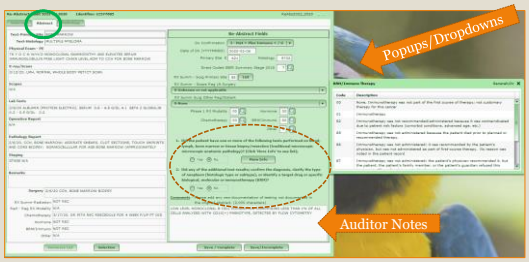
Note 1: While every attempt is made to keep the Hematopoietic database updated, it is impossible to keep the Hematopoietic database updated with all the immunophenotyping or genetics that can be done for a specific histology since clinical medicine continues to evolve. If immunophenotyping or genetics are used by the pathologist/managing physician to identify a **specific** neoplasm that are not included in the Hematopoietic database, and genetic testing and/or immunophenotyping are listed as Definitive Diagnostic methods for that histology, go ahead and use these.

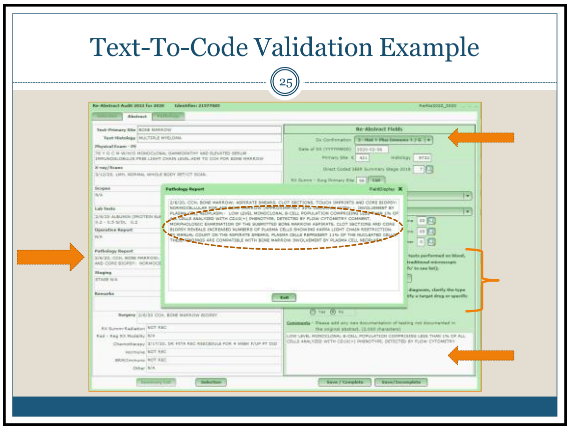
Note 2: The following histologies are diagnosed based on immunophenotyping or genetics and therefore should only be diagnostic confirmation 3: 9806/3, 9807/3, 9808/3, 9809/3, 9812/3, 9813/3, 9814/3, 9815/3, 9816/3, 9817/3, 9818/3, 9819/3, 9865/3, 9866/3, 9869/3, 9871/3, 9877/3, 9878/3, 9879/3, 9896/3, 9897/3, 9911/3, 9912/3, 9965/3, 9966/3, 9967/3, 9968/3, 9986/3.

Note 3: The following histologies should never be assigned diagnostic confirmation 3 since they are non specific codes and neither genetic testing or immunophenotyping are listed as Definitive Diagnostic Methods for these histologies. If there is Immunophenotyping or genetics available, then a more specific histology code may be able to be assigned: 9590/3, 9655/3, 9800/3, 9820/3, 9860/3, 9863/3, 9980/3, 9982/3, 9989/3, 9991/3.

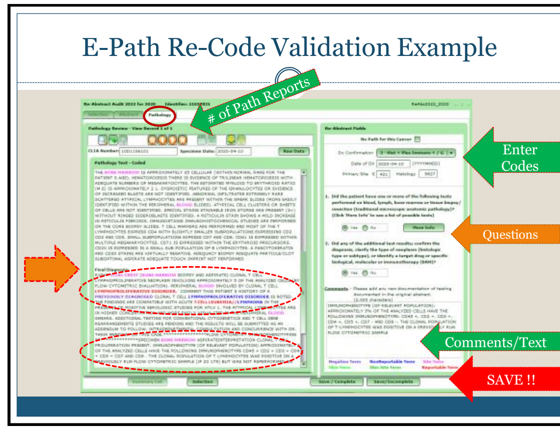
Text-To-Code Validation Example

24

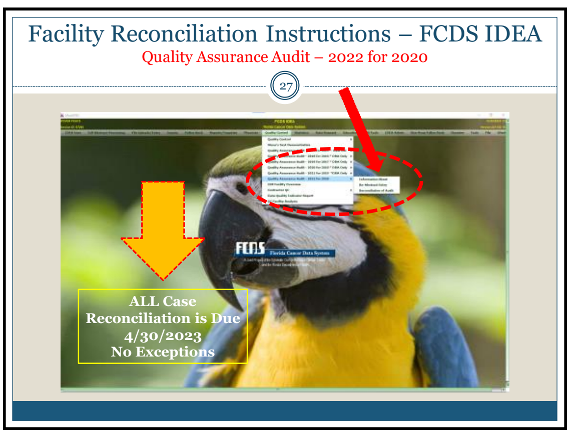




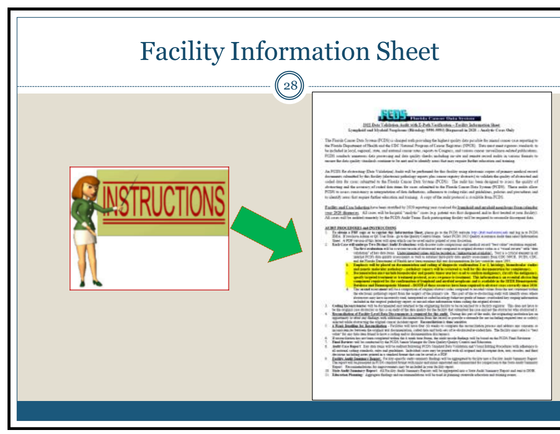
25



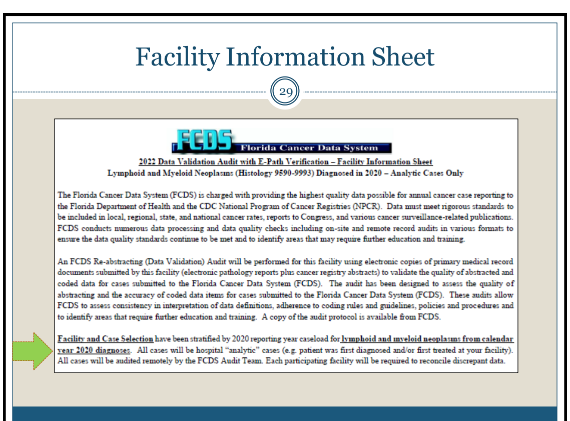
26



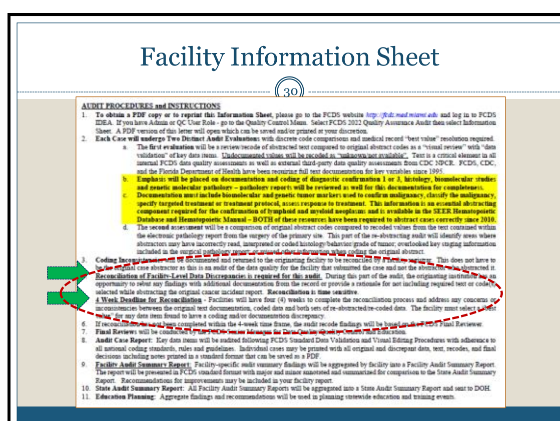
27



28



29

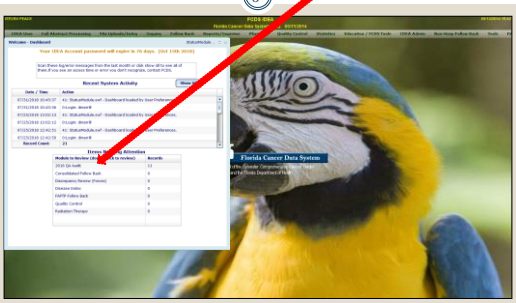


30

FCDS IDEA - Dashboard Notification

Quality Assurance Audit – 2022 for 2020

31

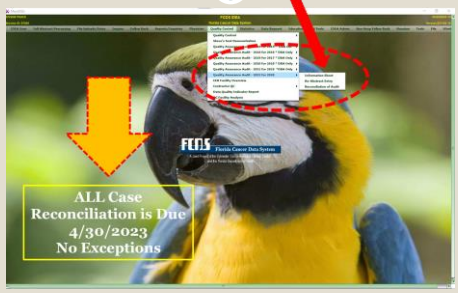


31

Accessing Data Quality Audit through IDEA

Quality Assurance Audit – 2022 for 2020

32

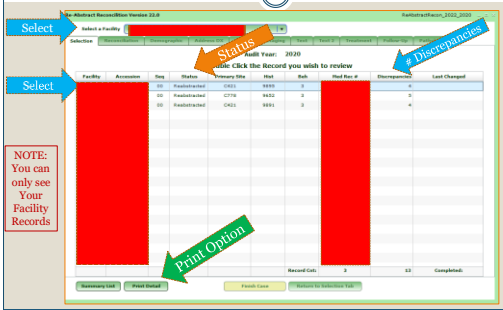


32

Go to Quality Control – 2022 Audit

Quality Assurance Audit – 2022 for 2020

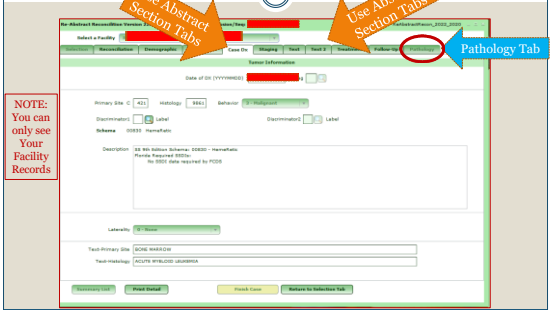
33



33

Facility Reconciliation - Navigation

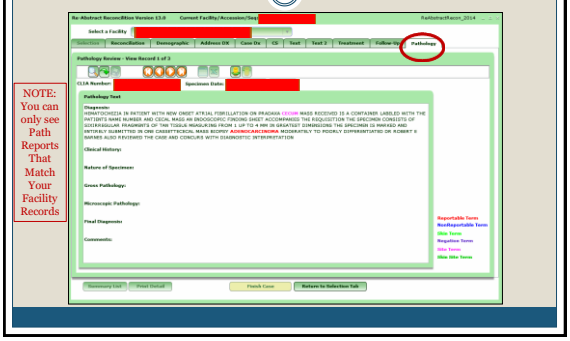
34



34

Facility Reconciliation - Navigation

35



35

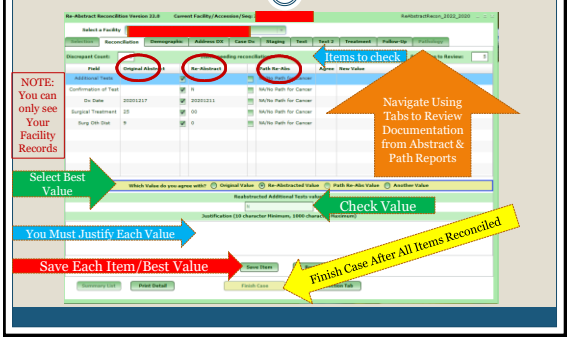
Facility Reconciliation - Navigation

36

36

Facility Reconciliation Example

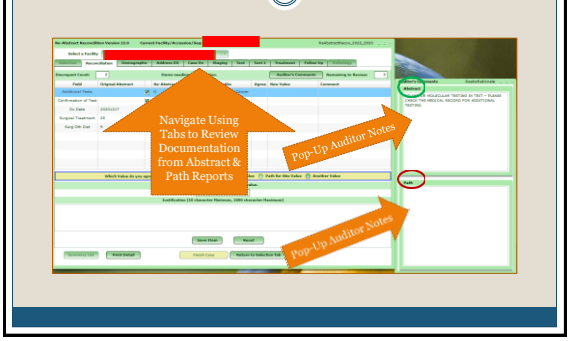
37



37

Facility Reconciliation Example

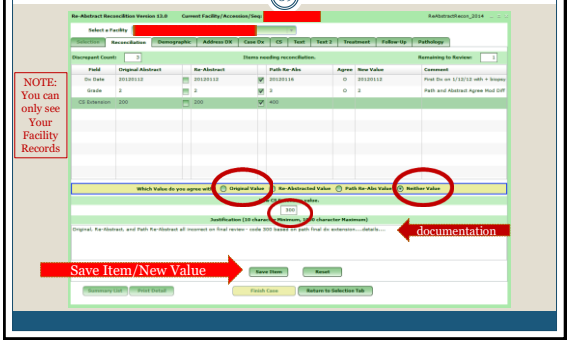
38



38

Facility Reconciliation Example

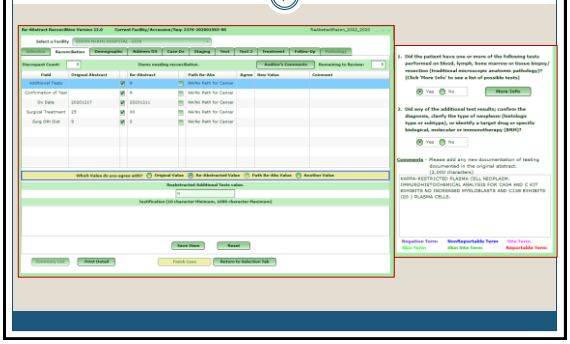
39



39

2 Questions Asked for Each Abst & Path Rpt

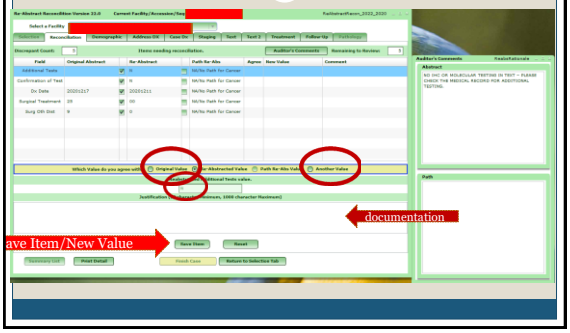
40



40

2 Questions Asked for Each Abst & Path Rpt

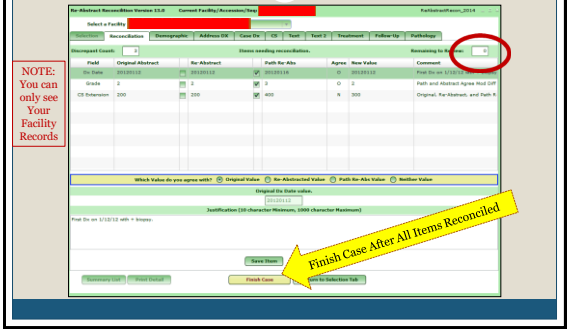
41



41

Facility Reconciliation Example

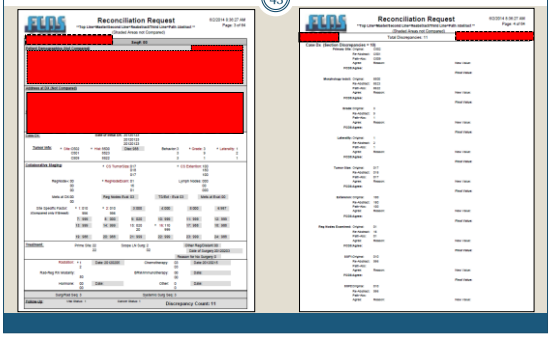
42



42

Reconciliation Request - Sample Report

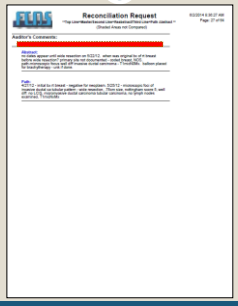
43



43

Reconciliation - Sample Notes

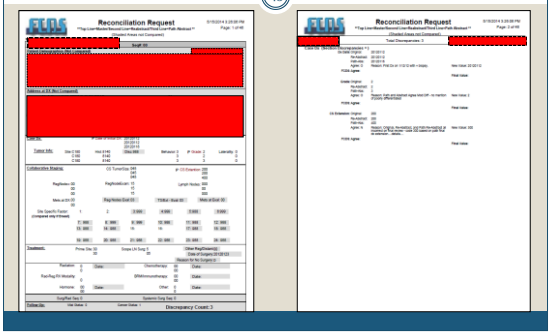
44



44

Reconciliation - Sample Saved Responses

45



45

FAQs

46

- How Many Cases Will I Have to Reconcile?
  - Selection includes from 1 to 40 "analytic" Neuroendocrine System Cases
    - Many Facilities will have 5 or less cases
    - Only a Few Facilities will have more than 10 cases
  - How Many Data Items Will I Have to Reconcile?
  - It Depends on # Discrepant Data Item Values for Each Case
    - At Most - 14 Items for Re-Abstract
    - At Most - 4 Items for Re-Path Cases
    - TEXT IS REQUIRED TO VALIDATE ALL CODES
  - How Long Do We Have to Reconcile Cases?
  - **DEADLINE - 4 weeks from notification – 4/30/2023**
- What Happens if I Do Not Reconcile My Cases?
  - Cases will undergo Final Reconciliation by FCDS QC Manager without your input and what FCDS decides sticks…Usually 1st Reviewer Data.

46

Audit Summary Reports

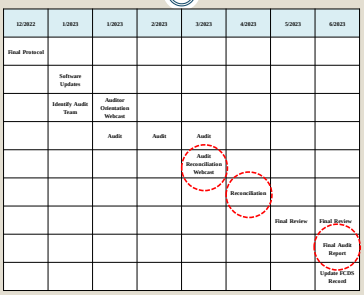
47

- Facility-Specific
- State Comparison
- Major Errors
  - Incorrect Date of Diagnosis – Year
  - Incorrect Number of Primaries
  - Incorrect Primary Site
  - Incorrect Histology Code
  - Incorrect Behavior Code
  - Incorrect SS2018
- Minor Errors
  - Incorrect Date of Diagnosis – Month or Day
  - Incorrect Diagnostic Confirmation
  - Incorrect Sex – sex is required for text
  - Incorrect Race/Ethnicity – race/ethnicity required for text
  - Incorrect Primary Sub-Site – assess overuse of C**.9 cases
  - Incorrect Clinical Grade/Pathological Grade/Post-TX Grade
  - Incorrect Tumor Size Summary
  - Incorrect Nodes Examined/Nodes Positive
  - Incorrect Treatment
- Recommendations

47

Timeline

48



48

Questions

49

49