CDC & Florida DOH Attribution

"We acknowledge the Centers for Disease Control and Prevention, for its support of the Florida Cancer Data System, and the printing and distribution of the materials for the 2015-2016 FCDS Webcast Series under cooperative agreement DP003872-03 awarded to the Florida Department of Health. The findings and conclusions in this series are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention".

FCDS would also like to acknowledge the Florida Department of Health for its support of the Florida Cancer Data System, including the development, printing and distribution of materials for the 2015-2016 FCDS Webcast Series under state contract CODJU. The findings and conclusions in this series are those of the author(s) and do not necessarily represent the official position of the Florida Department of Health.

2

Agenda

Florida Cancer Data System Annual Meeting
Day 1 - Wednesday, July 26, 2017
Wyndham Grand Orlando Resort at Bonnet Creek

7:30 am to 8:30 am	Registration	
8:30am	Welcome and Introduction • Florida Department of Health *Tara Hylton, MPH – Epidemiologist, Public Health Research* • University of Miami Miller School of Medicine *David Lee, PhD, FCDS Project Director*	
8:35 am to 8:45 am	DOH Update	Tara Hylton, MPH
8:45 am to 9:00 am	FCDS Updates – State of the State	Gary Levin, BA, CTR
9:00 am to 9:15 am	Firefighter Cancer Linkage Project Update	David Lee, PhD
9:15 am to 9:40 am	FCDS Survival Monograph	Anders Alexanderson, MS
9:40 am to 10:00 am	A Fundamental Learning Collaborative for the Cancer Surveillance Community (FLccSC pronounced "flossy")	Jill MacKinnon, PhD, CTR
10:00 am to 10:15 am	Break	
10:15 am to 10:35 am	Highlights from the NAACCR 2017 Annual Conference	Monique Hernandez, PhD
10:35 am to 10:45 am	2016 Data Acquisition Summary	Mike Thiry, PMP
10:45 am to 11:15 am	2016 FCDS QC Activities Summary	Steve Peace, BS, CTR
11:15 am to 11:30 am	Update on Physician Reporting & CAPIS System	Gary Levin, BA, CTR
11:30 am to 11:45 am	Update on Meaningful Use Reporting	Monique Hernandez, PhD
11:45 am to 12:00 pm	FCDS Facility Follow-Up Report in IDEA (Batch & Inquiry)	Gary Levin, BA, CTR
12:00 pm to 1:30 pm	Lunch on your own	
1:30 pm to 1:50pm	2016 NPCR Data Quality Evaluation	Meg Herna, CTR
1:50 pm to 2:15 pm	2016 FCDS Data Quality Audits (Lung - 2014 Dx & 2015 Dx)	Steve Peace & Meg Herna
2:15 pm to 3:00 pm	2018 Updates to National Standards - ICD-O-3, MPH, AJCC 8th	Steve Peace, BS, CTR
3:00 pm to 3:30 pm	Break	
3:30 pm to 3:45 pm	Jean Byers Award Presentation	Mike Thiry, PMP Gary Levin, BA, CTR
3:45 pm to 4:00 pm	2017-2018 FCDS Education and Training Plan	Steve Peace, BS, CTR
4:00 pm to 5:00pm	Round Table Discussion	All
5:00 pm	Wrap Up and Adjourn	

2017 Florida Cancer Data System Annual Meeting

NCRA CEU 2017-088
Total Conference CEU = 9.5 hours
Category A CEU = 3.75 hours

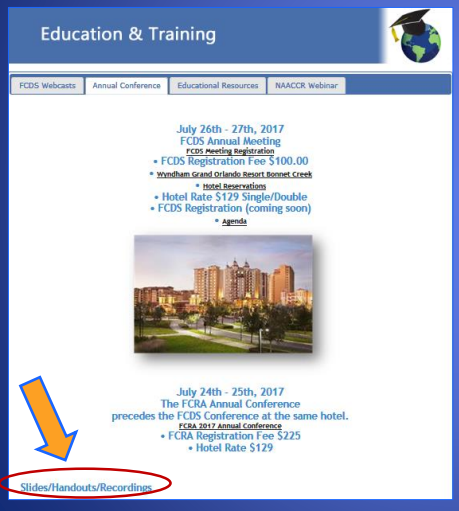
Florida Cancer Data System Annual Meeting
Day 2 – Thursday, July 27, 2017
Wyndham Grand Orlando Resort at Bonnet Creek

7:30 am to 8:30 am	Registration	
8:30 am to 9:15 am	How to Use the AJCC Cancer Staging Manual, 8th edition	Steve Peace, BS, CTR
9:15am – 10:15am	New Site-Specific Fields "Required for Staging" AJCC 8th ed.	Steve Peace, BS, CTR
10:15 am to 10:30	Break	
10:30am – 11:00am	FCDS EDITS Metafile and Navigating the TNM & Staging Edits	Steve Peace, BS, CTR
11:00am to 12:00pm	Recent Developments in Cancer Diagnosis and Treatment	Steve Peace, BS, CTR
12:00 pm	Adjourn	

2017 Florida Cancer Data System Annual Meeting

Recorded Sessions & Materials

https://fcds.med.Miami.edu/inc/educationtraining.shtml



4

Modernizing the Florida Cancer Data System

Tara Hylton, MPH
Administrator
Registries & Surveillance Section
Public Health Research
Division of Community Health Promotion

Modernizing FCDS – Current Steps

- How to Accomplish:
  - Increase cancer reports from ALL non-hospital sources
  - Increase external data linkages
- Resources to Accomplish:
  - Specialized staff
  - Develop processing software to assist in consolidation
  - Develop educational resources and tools

Modernizing FCDS – Current Steps

- Accomplished thus far:
  - Collecting claims data from select private physicians
    - Provides a new cancer abstract, if not already in the FCDS masterfile
    - Provides granular treatment information
  - Linkage with the Florida Veterans Administration (VA) Hospitals
  - Improved Learning Management System (LMS)
  - Improvements in data access and release (DREAMS)

Modernizing FCDS – Next steps

- How to Accomplish (with minimal burden to providers or systems):
  - Include comorbidity data
  - Include genetic information
  - Include screening data
- Resources to Accomplish:
  - Revising statue and administrative code, where needed
  - Specialized staff
  - Developing new partnerships
  - Develop processing software

Vision for FCDS

Modernized cancer registry ensures:

- Complete and high quality data **representative of all Florida** available for use by:
  - Researchers
  - Prevention, outreach, and education programs
  - Citizens of the state of Florida
  - Healthcare professionals
  - Policy makers
- Challenges of changing cancer management are accounted for in FCDS' data collection procedures
- FCDS has a solid foundation upon which to develop further strategic and desired enhancements

9

FCDS UPDATE: THE STATE OF THE STATE

Gary M. Levin, BA, CTR

FCDS Annual Conference 7/26/2017

10

NAACCR Gold Certification
Fifteenth Consecutive Year!!

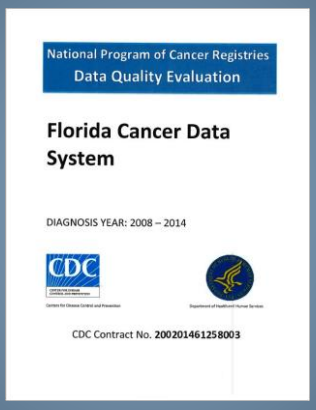

North American Association of Central Cancer Registries

The Board of Directors certifies that
Florida Cancer Data System
has attained the
NAACCR Gold Standard
for Quality, Completeness, and Timeliness

Your Hard Work and Dedication Makes this Possible - Thank You

11

Overall Data Accuracy Rate 99.1%


National Program of Cancer Registries
Data Quality Evaluation

Florida Cancer Data System

DIAGNOSIS YEAR: 2008 – 2014

CDC Contract No. **200201461258003**

Your Hard Work and Dedication Makes this Possible - Thank You

12

New Accomplishments - DREAMS

- 101 Data Request Applications Entered Since Implementation
- Tracks Data Request from Start To Completion
  - Application
  - DOH Approvals/IRB Approvals/Vital Statistics Approvals
  - Secure Messaging between Requestor/FCDS/ DOH
  - Secure Delivery of Requested Data to Requestor

Web Link: https://fcds.med.miami.edu/inc/datarequest.shtml

13

New Accomplishments - FLccSC LMS

FLccSC
Fundamental Learning Collaborative for the Cancer Surveillance Community

- Joint Project between Florida and South Carolina CCRs
- Over ~200 Students Registered in Florida
- Current Courses
  - New Abstractor and Annual Renewal Code Test
  - Abstractor Basic Course (Updates coming)
- Administrator Controls Content, Quizzes & Student Registration
- Keeps History of Student
  - Courses Completed and Quiz Scores
  - CEU's and Allows for On-Demand Printable Certificates

Web Link: https://fcds.med.miami.edu/inc/flccsc.shtml

14

Firefighter Cancer Linkage Project Update

David J. Lee[1,2,3], Tulay Koru-Sengul[1,2,3], Monique N. Hernandez[1], Jill A. MacKinnon[1]
Alberto Caban-Martinez[2,3] Laura A. McClure[1,3], Erin Kobetz[4]

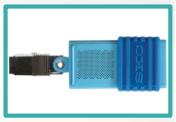
[1]Florida Cancer Data System (FCDS), University of Miami Miller School of Medicine
[2]Department Public Health Sciences, University of Miami Miller School of Medicine
[3]Sylvester Comprehensive Cancer Center, University of Miami Miller School of Medicine
[4]Department Medicine, University of Miami Miller School of Medicine

This work was supported by State of Florida appropriation #2382A

15

Firefighter Cancer Initiative (FCI) Goals

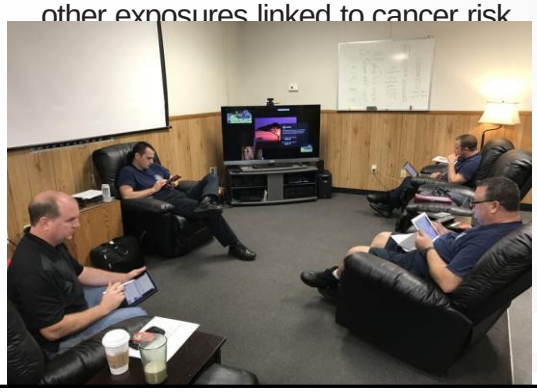
- To monitor, understand and address the excess burden of cancer among firefighters
- 13 interlocking projects designed to move innovative research from "bench" to "trench"



16

Annual Cancer Survey and Exposure Reporting

- Annually collect health information and cancer risk factors of active and retired Florida firefighters (n > 1000)
- Long-term goal is to use data to identify occupational and other exposures linked to cancer risk



Previous Research Using FCDS data

Cancer Incidence in Florida Professional Firefighters, 1981 to 1999

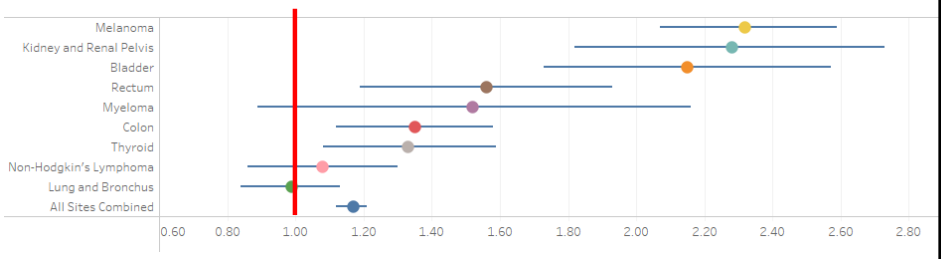
Fangchao Ma, MD, PhD
Lora E. Fleming, MD, PhD
David J. Lee, PhD
Edward Trapido, ScD
Terence A. Gerace, PhD

Objective: *The objective of this study was to examine the cancer risk associated with firefighting.* ***Methods:*** *Standardized incidence ratio analysis (SIR) was used to determine the relative cancer risk for firefighters as compared with the Florida general population.* ***Results:*** *Among 34,796 male (413,022 person-years) and 2,017 female (18,843 person-years) firefighters, 970 male and 52 female cases of cancer were identified. Male firefighters had significantly increased incidence rates of bladder (SIR = 1.29; 95% confidence interval = 1.01–1.62), testicular (1.60; 1.20–2.09), and thyroid cancers (1.77; 1.08–2.73). Female firefighters had significantly increased incidence rates of overall cancer (1.63; 1.22–2.14), cervical (5.24; 2.93–8.65), and thyroid cancer (3.97; 1.45–8.65) and Hodgkin disease (6.25; 1.26–18.26).* ***Conclusions:*** *Firefighting may be associated with an increased risk of selected site-specific cancers in males and females, including an overall increased cancer risk in female firefighters.* (J Occup Environ Med. *2006;48:883–888*)

Firefighters are routinely exposed to various carcinogens during firefighting and overhaul (ie, time period for searching and extinguishing hidden fires after the main fire is brought under control).[1] Carcinogens such as benzene and polycyclic aromatic hydrocarbons (PAHs) have been frequently detected in fire smoke.[2] Epidemiologic studies have demonstrated an increased risk for several cancers that can be plausibly linked to carcinogens encountered by firefighters in the course of their work.[3,4] There is evidence of excess mortality from leukemia, non-Hodgkin lymphoma, multiple myeloma, and cancers of the brain and bladder. Weaker but still plausible evidence has linked firefighting to increased mortality risks from melanoma and cancer of the rectum, colon, stomach, prostate, and lung.[4–11] Because most previous studies of firefighters and cancer were based on mortality data, the full extent of their cancer risk, in particular the risk of being diagnosed with cancer, is not yet known. This retrospective co-

Results

Select High-Priority Cancer Standardized Incidence Ratios: FCDS Years 1981-2013



Standardized Incidence Ratios

19

Future Direction 2017-18

- Recent statute modification now allows for release of SS #; may help 'recover' cases among the 30,000 records we could not link
  - Will enable us to include vital missing female cases and will further strengthen case counts for males
- Relink with the cancer registry and undertake linkage with mortality file

633.516 ~~Division to make study of firefighter employee occupational diseases.~~ Studies of occupational diseases of firefighters or persons in other fire-related fields.— The division ~~shall make a continuous study of~~ is authorized to contract for studies, subject to the availability of funding, of ~~firefighter employee~~ occupational diseases of firefighters or persons in other fire-related fields and the ways and means for ~~their~~ the control and prevention of such occupational diseases. ~~and shall adopt rules as necessary for such control and prevention. For this purpose, the division is authorized to cooperate with firefighter employers, firefighter employees and insurers and with the Department of Health.~~ For such studies, as well as other studies of firefighter or persons in other fire-related fields, that are funded, in whole or in part, under an agreement, including contracts or grants, with the department, the division is authorized to release confidential information for such firefighter or persons in other fire-related fields, to parties who have entered agreements, with associated security measures, with the department when the study being conducted tracks diseases on an individual.

Cancer Survival in Florida 1999-2003

or Why Rates are Harder Than Counts

Anders Alexandersson

Florida Cancer Data System

21

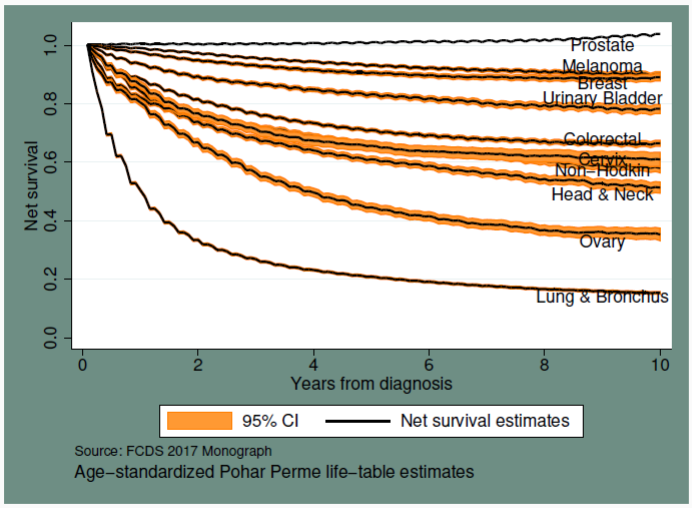
Survival analysis approaches and recommended FCDS usage

Measure	Framework: Cause-specific	Framework: Relative
Crude	Registry-based randomized controlled trial (RRCT)	Risk communication
Net	Causality with observational data	Life tables

Pohar Perme estimates

15
22

Net survival by cancer site, Dx 1999-2003



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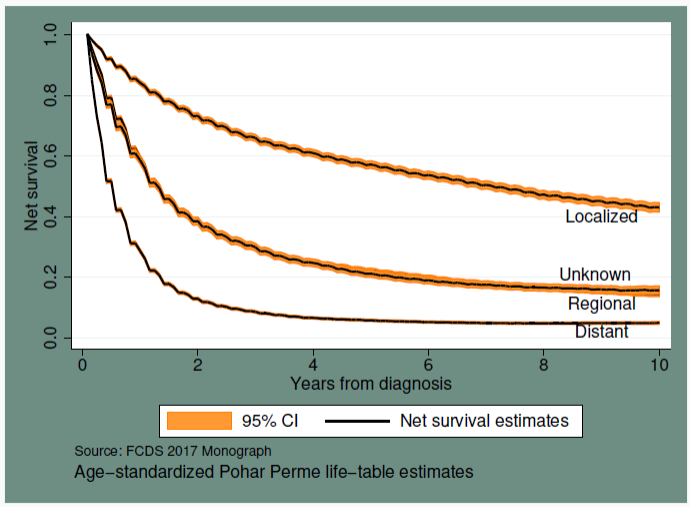
Net survival of lung cancer by stage, Dx 1999-2003



22
24

Read the FCDS 2017 Monograph[1] and the Technical Report[2]. ☺

25

FLccSC
Fundamental Learning Collaborative for the Cancer Surveillance Community

Florida's New Distance Learning Platform

Jill MacKinnon, PhD

FCDS Florida Statewide Cancer Registry
Florida Cancer Data System

26

What is FLccSC

- Web based distance educational platform
  - Learning Management System (LMS)

Florida Cancer Data System

27

FLccSC is the Umbrella Platform

- FLccSC is fully functioning LMS administered and maintained on a central server managed by the Florida Cancer Data System
- Each CCR LMS operates as a stand-alone customized platform (logos, branding and URL)
  - Accessible via a link on the CCR web site
- Each CCR has a site administrator who maintains their respective CCR site

Florida Cancer Data System

28

FLccSC Enrollment Statistics

- Over 200 active users as of Monday
  - Abstractor Basic Course
    - 47 students enrolled
    - 45 course in process
    - 2 completed
  - Abstractor Renewal Test
    - 125 abstractors enrolled
    - 14 test in process
    - 111 renewed their Abstractor Code

FCDS Abstractor Code Test

- Any abstractors working in the State of Florida must have an active abstractor code
  - Successful completion of the FCDS Abstractor Code Test is required for new or renewal codes
  - ALL Tests are now 20 questions – new or renewal
  - Abstractor codes are valid for 12 month
    - FCDS abstractor codes must be renewed annually
- If you **do not have** FCDS IDEA login credentials, please refer to the "New IDEA User" tutorial on the FCDS FLccSC/LMS page

How to Obtain and Renew your FCDS Abstractor Code

- Abstractors with an Abstractor Code or Abstractors wishing to get an Abstractor Code **MUST log into FLccSC through IDEA**
- Abstractors must login to FCDS IDEA, click the 'Education/FCDS Tools' menu item, select the Learning Management System option to access FLccSC in order to take the test
- Renewal: Abstractors will be notified via email one month prior to their code expiration date

FCDS Florida Statewide Cancer Registry Florida Cancer Data System

31

Coming Soon

- Steve Peace's FCDS Webcast Series
  - Webcasts will be presented live
    - Recorded Webcasts will also be available in FLccSC for individuals that didn't have the opportunity to view it live
    - All quizzes will be in FLccSC
      - CEU's will be awarded based on the successful completion of a quiz for each webcast – 3 to 5 questions
      - You will also get a Certificate of Completion for your records that will include the NCRA CEU information

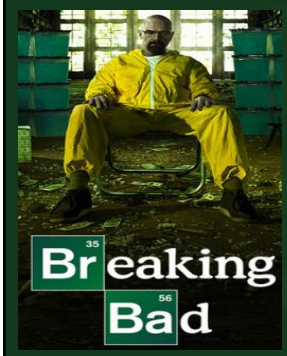
FCDS Florida Statewide Cancer Registry Florida Cancer Data System

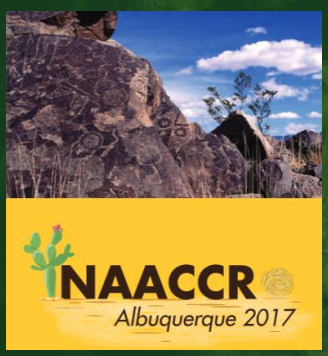
32

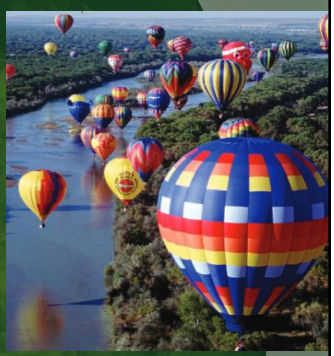
North American Association of Central Cancer Registries 2017 Annual Conference Highlights

Monique N. Hernandez, PhD

Florida Cancer Data System Annual Meeting July 26, 2017







Breaking Barriers in Cancer Surveillance

Plenary Sessions

- Breaking Barriers - International Cancer Surveillance
- Cancer Surveillance In Action: An International View
- Cancer Surveillance in American Indians/Alaska Natives/Canadian First Nations
- Registry of the Future: Surveillance in an Era of Emerging Technology and Precision Medicine

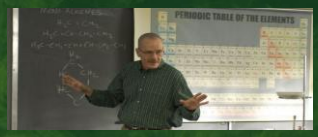
35

Conference Themes and Topics

- Expanding the role of cancer registries
- Registry data tools
- Improving cancer treatment linkage
- Cancer in native/indigenous peoples
- International Cancer Surveillance
- Cancer epidemiology

36

FCDS Presentations



Gary Levin

Fundamental Learning Collaborative for the Cancer Surveillance Community (FLccSC)

Advances in Integrating Health Claims Data Into Cancer Registry Data Systems

Anders Alexandersson

Probabilistic Record Linkage at the Florida Cancer Data System: A Data :Science Project Using R and Stata

Dr. David Lee

Occupational Cancer Surveillance in the Age of Restricted Identifier Access: A Linkage of Florida Cancer Data System (FCDS) Data with Firefighter Certification Records

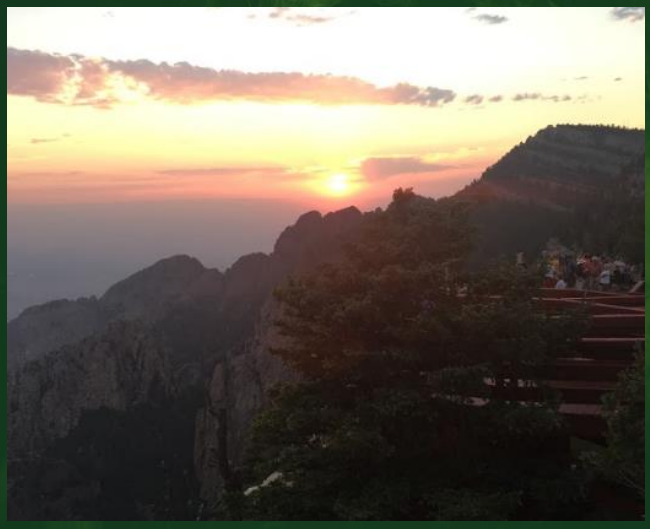
Dr. Monique Hernandez

Physician Medical Claims Reporting in Florida

Sasha Raju – Attendee

Steven Peace – Attendee

37



38

Data Acquisition Update

FCDS ANNUAL MEETING

JULY 26 AND 27

Reporting Entities Summary

Hospitals	252
Radiation Treatment Centers	127
Surgery Centers	453
Pathology Labs (CLIA's)	1092
Hematologists	23
Oncologists	187
Urologists	507
Dermatologists	943
Other States	42
Other Specialty Physicians	1165
Total	4,791 Reporting Entities

2016 Abstracts Received

As of July 1, 2017

- 182,134 Abstracts for the 2016 Data Year
  - Hospitals 168,870
  - Radiation Treatment Centers 1,556
  - AMBI Surg 97
  - Dermatology Physician Abstracts 10,897
  - Physician Claims 714

41

Abstract Counts at Deadline (6/30) and 1 year later

	Deadline	1 Year Later
2009 Data (6/2010)	166,303	185,703
2010 Data (6/2011)	136,610	174,701
2011 Data (6/2012)	149,368	185,969
2012 Data (6/2013)	165,991	189,693
2013 Data (6/2014)	171,179	194,862
2014 Data (6/2015)	167,931	200,817
2015 Data (6/2016)	181,216	223,227
2016 Data (6/2017)	182,134	

Average 29K cases up to one year late…..

42

Certification of Completeness

Reminder: the requirement to certify when you have completed your submission for the data year

- Provide complete view of who is complete and who is still working on their submissions
- Maintains a record of when a facility is done and maintains a record of any explanation of volume below expected
- Helps us focus on working with Late Reporters

43

Physician Reporting

Claims received by Year

2013	4,565,532
2014	3,241,465
2015	3,449,533
2016	3,884,936
2017	1,684,871
Total	17,030,785

- 785 of 901 physicians have sent data (88%)

44

Physician Reporting

Dermatology Abstracts

- 2011 — 5,691 abstracts reported
- 2012 — 7,560 abstracts reported
- 2013 — 7,647 abstracts reported
- 2014 — 9,559 abstracts reported
- 2015 — 11,333 abstracts reported
- 2016 — 18,859 abstracts reported
- 2017 (as of July 1) — 8,534 abstracts reported

Total since inception…..69,183 abstracts

- 729 of 943 have sent data (77% of registered)

45

2016 Physician Reporting

Oncologists	519,211	Claims Received
Urologists	682,562	Claims Received
HEMA/ONC	2,519,398	Claims Received
Hematologists	13,030	Claims Received

(as of July 1, 2017)

46

FCDS Florida Cancer Data System

2016-2017 QC Activities Summary

47

FCDS ANNUAL CONFERENCE
ORLANDO, FLORIDA
7/27/2016

STEVEN PEACE, CTR

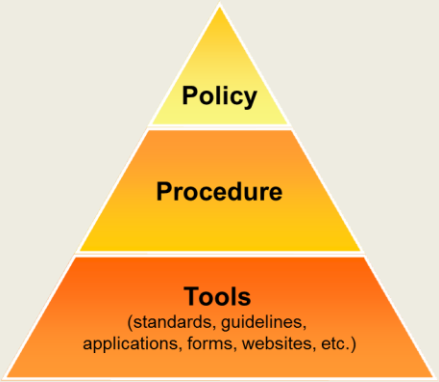
NAACCR GOLD CERTIFICATION

15th year in a row!!

FCDS Data Quality Program - Methods

48

- **FCDS Policy**
  - FCDS Abstractor Code Requirement
  - FCDS EDITS Requirement
  - FCDS Text Documentation Requirement
  - FCDS Deadlines and IT Security
- **FCDS Procedures**
  - FCDS IDEA – Communication/Transmission
  - FCDS Internal Data Processing Monitoring
  - FORCES/CORRECTIONS/DELETIONS
  - Patient and Tumor Linkage & Consolidation
- **FCDS Monitoring / Audits**
  - Audits for Completeness
  - Audits for Timeliness
  - Audits for Accuracy
- **FCDS Data Quality Reports**
  - Quarterly/Annual Status Reports
  - QC Review Summary
  - Ad Hoc Reports
  - Audit Results



Submission Summary & QC Review Sample

49

Description	# Cases	% of Total
Total Cases Submitted to FCDS 1/1/2016-12/31/2016 – All Sources	**212,547**	**100%**
Total Cases – NO CHANGE – Pass ALL Edits – No Visual Review by FC or QC	**201,087**	**94.6%**
Total Cases – FC Visual Review *(FC Review to assess case for possible FORCE)*	**11,460**	**5.4%**
• FORCED *(EDIT Override Confirmed and FORCE was set - NOT an error)*	4,276	2.0%
• CORRECTED *(1 or more corrections made based on text – NOT a FORCE)*	5,046	2.4%
• DELETED *(duplicate case, not a reportable neoplasm, not a new primary)*	2,138	1.0%
Total Cases – Every 25th Case QC Review Sample/Visual Editing • *Sample includes **4% of analytic** hospital, radiation, surgery center cases* • *Sample includes **ALL male breast** and **ALL pediatric** cases* • *Sample **does not include** dermatology or other **physician office cases***	**9,951**	**4.7%**
Total Cases Visually Edited by FCDS in 2014 ***(combined FC and/or QC Review)***	**21,411**	**10.1%**

QC Review Sample / Visual Editing - Summary

50

Description	# Cases	% of Total
Total Cases – Every 25th Case QC Review Sample/Visual Editing	**9,951**	**4.7% of All Cases**
Total Cases – NO CHANGE on QC Review	**6,874**	**69.1% of QC Sample**
Total Cases Sent to Facility with Correction or Inquiry	**3,077**	**30.9% of QC Sample**
Total Cases Sent to Facility with Correction or Inquiry	**3,077**	**30.9% of QC Sample**
• NO CHANGE after Follow-Back to Facility	408	13.3%
• FORCED *(EDIT Override Confirmed - NOT an error)*	39	1.3%
• CORRECTED *(1 or more corrections made – NOT a FORCE)*	2,573	83.6%
• DELETED *(duplicate case, not a reportable neoplasm, not a new primary)*	57	1.9%

AHCA In-Patient: Follow-Back Analysis

51

AHCA In-Patient Follow-Back	2010	2011	2012	2013	2014
Missed Case - Abstract	5,257	4,063	3,480	3,429	2,848
Abstracted but Not Transmitted	705	669	632	851	693
Total Missed Cases	5,962	4,732	4,112	4,280	3,541
Not Reportable - NED	5,371	5,174	6,024	5,645	5,087
Not Reportable - Not Malignant	2,461	2,348	1,899	1,618	975
Not Reportable - Equivocal	3,466	3,396	3,640	3,253	2,145
Not Reportable - No Mention CA	3,164	3,865	4,656	4,103	1,596
Not Reportable - Other	2,112	2,342	2,237	1,709	4,489
Total Not Reportable	16,574	17,125	18,456	16,328	14,292
Follow-Back Not Returned	436	780	774	732	841
Total AHCA In-Patient Follow-Back	22,972	22,637	23,342	21,340	16,690

AHCA Ambi: Follow-Back Analysis

52

AHCA Ambulatory Follow-Back	2010	2011	2012	2013	2014
Missed Case - Abstract	6,275	4,338	3,757	4,002	3,277
Abstracted but Not Transmitted	575	498	521	581	576
Total Missed Cases	6,850	4,836	4,278	4,583	3,853
Not Reportable - NED	2,573	2,573	2,361	2,651	2,455
Not Reportable - Not Malignant	2,599	2,576	793	798	716
Not Reportable - Equivocal	785	710	498	448	385
Not Reportable - No Mention CA	727	837	1,091	577	377
Not Reportable - Other	2,741	3,061	1,559	1,052	1,218
Total Not Reportable	9,425	9,757	6,302	5,562	5,151
Follow-Back Not Returned	1,549	2,366	1,304	1.559	2,069
Total AHCAAmbulatory Follow-Back	17,824	16,959	11,884	11,668	11,785

RQRS and FCDS Reporting

53

RQRS Data Submission Requirements by Calendar Year

Criteria	2017	2018	2019
To Achieve Compliance on Standard 5.2			
Data Submission Frequency: All new and updated cancer cases	Quarterly	Quarterly	Quarterly
Reportable Cases: Primary sites included	Measure-eligible (ME) sites* required; All sites accepted		
Data Timeliness: % of cases submitted within three months of date of first contact	Not Applicable		
Data Quality: All cancer cases submitted to RQRS with edit errors are corrected and resubmitted	Not Applicable		
Data Use: RQRS data and performance reports are reviewed by cancer committee and documented in minutes	At least semi-annually	At least semi-annually	At least semi-annually
To Achieve Commendation on Standard 5.2			
Data Submission Frequency: All new and updated cases	Monthly		
Reportable Cases: Primary sites included	Measure-eligible (ME) sites* required; All sites accepted		
Data Timeliness: % of cases submitted within three months of date of first contact	25% of ME cases	50% of ME cases	75% of ME cases
Data Quality: All cancer cases submitted to RQRS with edit errors are corrected and resubmitted	Cases with errors are resubmitted error-free when complete		
Data Use: RQRS data and performance reports are reviewed by cancer committee and documented in minutes	At least quarterly		

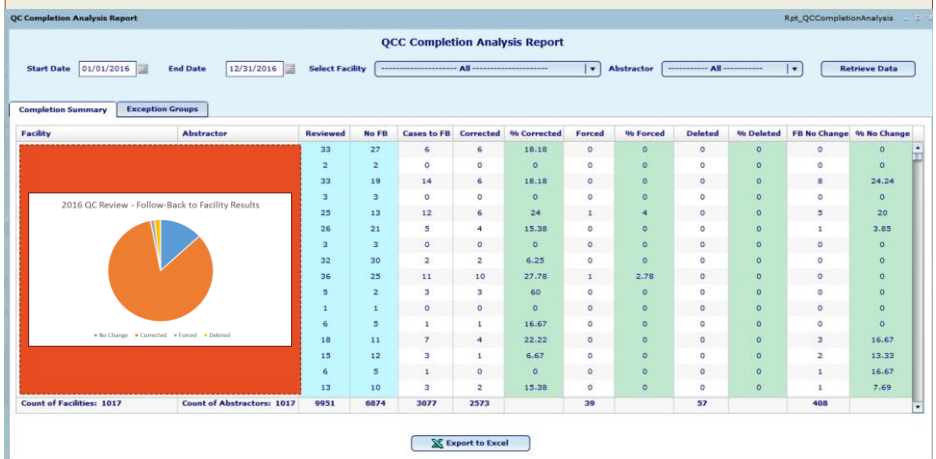
** Measure-eligible sites are defined as cases having any primary sites assessed by any quality measure being assessed in RQRS.*

FCDS Data Submission Requirements

- Frequency – Quarterly/Monthly
- E-updates to Cases – NOT DONE
- Reportable Cancers – ALL
- Data Timeline – 6 months post dx/tx with June 30th Annual Deadline
- Data Quality – Pass All FCDS EDITS
- Data Completeness – DX/TX 1st Crs for ALL Analytic Cases – DO NOT SUBMIT CASES IF INCOMPLETE!!!
- June 30th – Use TX Recommended Codes for any still incomplete cases.

QC Review Summary Reports

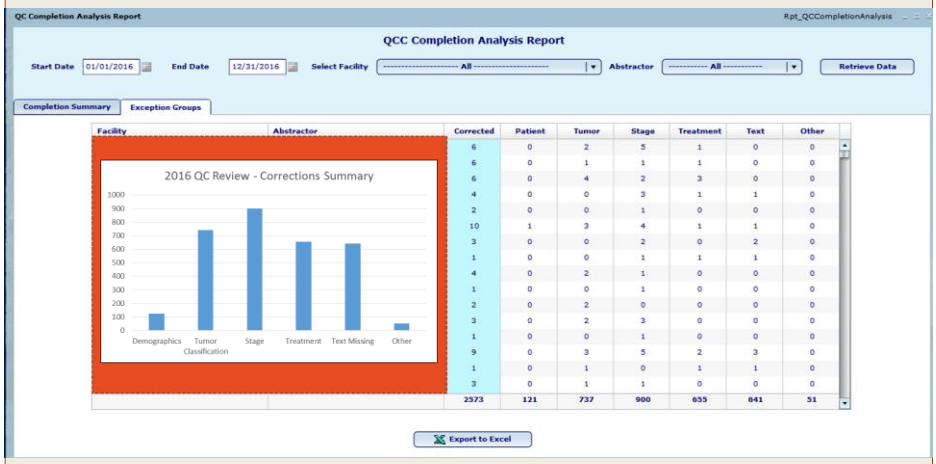
54



Facility	Abstractor	Reviewed	No FB	Cases to FB	Corrected	% Corrected	Forced	% Forced	Deleted	% Deleted	FB No Change	% No Change
		33	27	6	6	18.18	0	0	0	0	0	0
		2	2	0	0	0	0	0	0	0	0	0
		33	19	14	6	18.18	0	0	0	0	8	24.24
		3	3	0	0	0	0	0	0	0	0	0
		25	13	12	6	24	1	4	0	0	5	20
		26	21	5	4	15.38	0	0	0	0	1	3.85
		3	3	0	0	0	0	0	0	0	0	0
		32	30	2	2	6.25	0	0	0	0	0	0
		36	25	11	10	27.78	1	2.78	0	0	0	0
		5	2	3	3	60	0	0	0	0	0	0
		1	1	0	0	0	0	0	0	0	0	0
		6	5	1	1	16.67	0	0	0	0	0	0
		18	11	7	4	22.22	0	0	0	0	3	16.67
		15	12	3	1	6.67	0	0	0	0	2	13.33
		6	5	1	0	0	0	0	0	0	1	16.67
		13	10	3	2	15.38	0	0	0	0	1	7.69
Count of Facilities: 1017	Count of Abstractors: 1017	9951	6874	3077	2573		39		57		408	

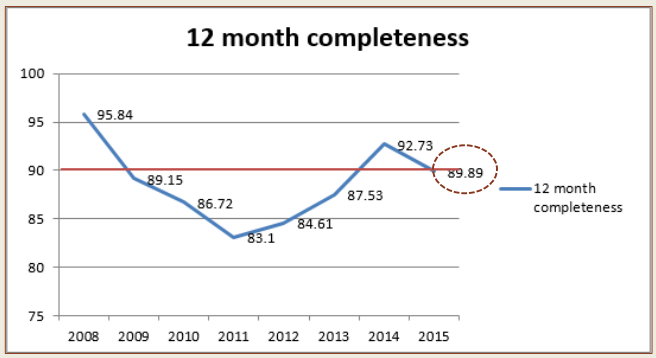
QC Review Summary Reports

55



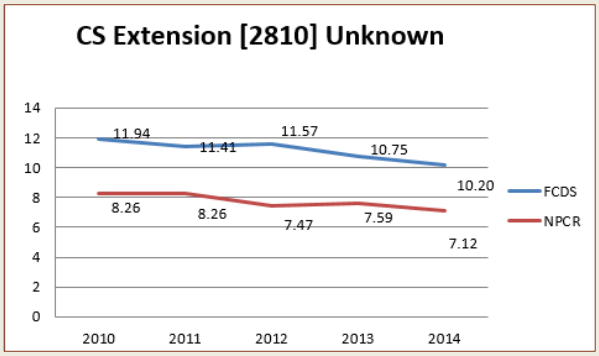
2017 Call for Data – NPCR DER Report

56



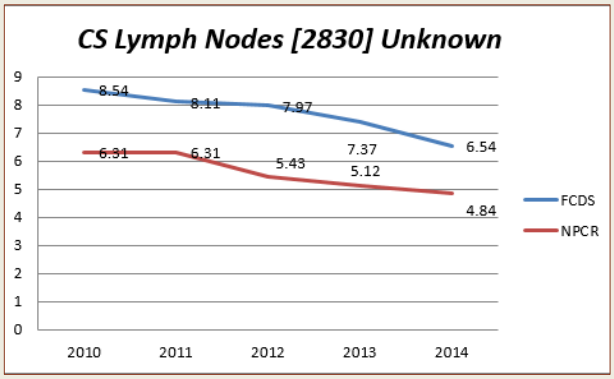
2016 Call for Data – NPCR DER Report

57



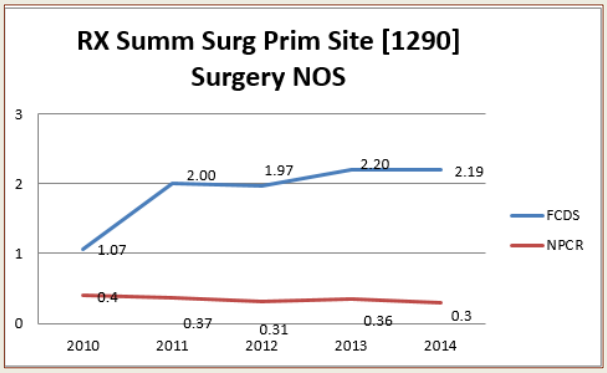
2016 Call for Data – NPCR DER Report

58



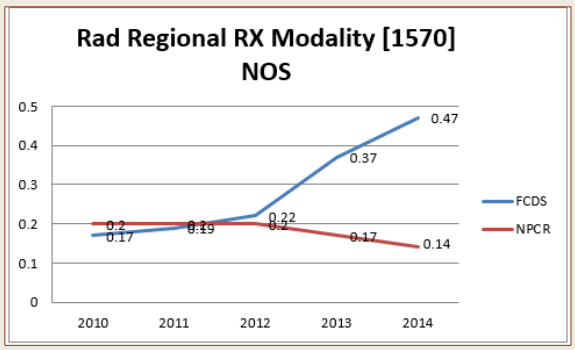
Overuse of Surgery NOS Codes

59



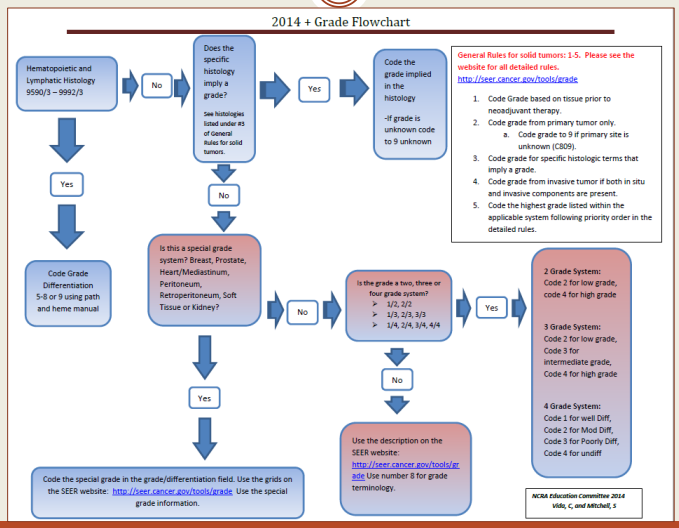
Overuse of Radiation NOS Codes

60



Use the 2014 Grade Coding Instructions

61



Use the 2014 Grade Coding Instructions

62

a. Two-grade system

Term	Description	Grade Code	Exception for Breast and Prostate Grade Code
1/2, I/II	Low grade	2	1
2/2, II/II	High grade	4	3

In transitional cell carcinoma for bladder, the terminology high grade TCC and low grade TCC are coded in the two-grade system.

b. Three-grade system

Term	Description	Grade Code	Exception for Breast and Prostate Grade Code
1/3	Low grade	2	1
2/3	Intermediate grade	3	2
3/3	High grade	4	3

Feedback from QC Review Sample

63

- Registrars are too quick to send C80.9 with history of other cancers – must look at case to see if is really an unknown primary or recurrence from previous
- Registrars still sending cases with C76.* - Please Don't Use.
- Registrars are too quick to send new primary when patient has recurrence of original primary – YOU MUST USE THE MPH Rules – Call with Questions !!!
  - Bladder
  - Other urinary
  - Female Genital
  - Lung
  - Breast
- Don't just automatically abstract a new case and expect FCDS to fix it for you.
- Increased Use of NOS and 'nothing' codes – tumor description & treatment
- Importance of Coding 2014 Grade Rules - used by NPCR to evaluate FCDS

Feedback from QC Review Sample

64

- Surg Primary Site coded to 90 is a problem when your facility is analytic
- Scope Regional Lymph Nodes for FNA are missed a lot - 95 or blank
- Surg other regional distant sites should almost always = 0
- Missing dates in text cannot be audited
- Document everything these days
- Not Paying Attention to Summary Stage – but maybe renewed with SS2018
- What Treatment is required to Satisfy Pathologic Staging Criteria?
- Can you assign AJCC TNM to only part of the TNM that "fits"?
- What if nodal dissection is not required but the TNM Edit is requiring it?
- Neoadjuvant therapy – when is it neoadjuvant tx and when is it not?

UPDATE ON PHYSICIAN REPORTING AND CAPIS SYSTEM

(CLAIMS, ABSTRACT & PATHOLOGY INTEGRATION SYSTEM)

Gary M. Levin, BA, CTR

FCDS Annual Conference 7/26/2017

65

Background

- Increase physician reporting
  - Capture missing first course treatment
  - Capture missing cases particularly in urological and hematopoietic
- Reduce burden on physicians to comply
  - 5010/837 reporting data standard
  - Duplicate claims submission and send to registry
- Process has evolved for almost 5 years

66

Background

- Received Over 17 Million Claims
  - Primarily Medical Oncologists and Dermatologists
  - Registration of Physician
    - Over 2,000 Physicians Registered
    - Used Florida Licensure and NPI to Identify
    - Mass e-mail sent where e-mail available
    - **EXTREMELY** Labor Intensive
  - Statewide Coverage

67

Results – Treatment Enhancing Abstracts

- Patient/Tumor Linked Successfully
- Shadow image of consolidated Patient and Tumor data
- Overlay all treatment information gleaned from claims
- Process, link and consolidate according to routine process
- Improves First Course Therapy
- Date of Last Contact – set to highest claims date

68

Results – Treatment Enhancing Abstracts

Dx Year	Chemo	Surgery	Radiation	Hormone	BRM
2010	1,298	0	6	73	4
2011	3,141	2	81	159	10
2012	3,481	20	409	257	101
2013	6,417	134	1,307	842	706
2014	8,158	181	1,953	1,239	1,177
2015	5,957	64	1,367	796	991
Total	**28,452**	**401**	**5,123**	**3,366**	**2,989**
Processed	**54,163**				
Enhancements	**40,331**				

69

Results – Treatment Enhancing Abstracts

Chemo Improvement By Site	Count
Lung and Bronchus	7,782
Breast	6,830
Pancreas	1,617
Non-Hodgkin Lymphoma - Nodal	1,440
Rectum	1,031
Myeloma	825
Esophagus	752
Ovary	638
Urinary Bladder	630
Sigmoid Colon	582

Radiation Improvement by Site	Count
Prostate	2,217
Breast	1,007
Lung and Bronchus	814
Rectum	179
Esophagus	78
Brain	74
Cervix Uteri	65
Anus, Anal Canal and Anorectum	64
Larynx	63
Corpus Uteri	57

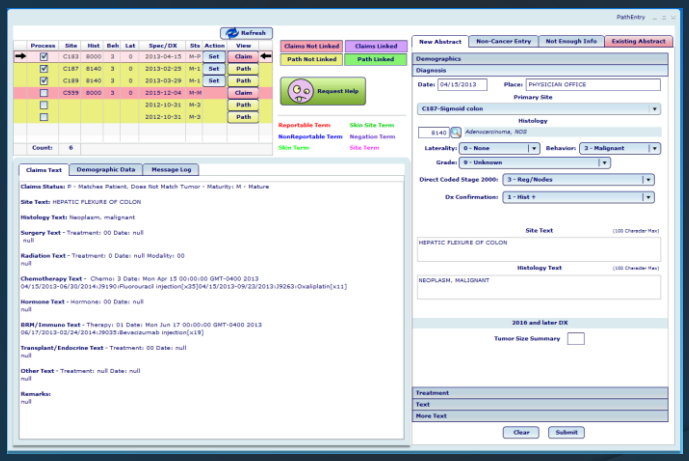
70

Results – New Incidence Abstracts

- Claims Abstracts Not Matching Database
- Link claims abstract to Pathology Reports
- Visual Review (Labor Intensive)
  - Create case finding abstracts
  - Link to existing cases (missed automated linkage)
  - Send case to physician for follow back
  - Mark as non-cancer/non-reportable case

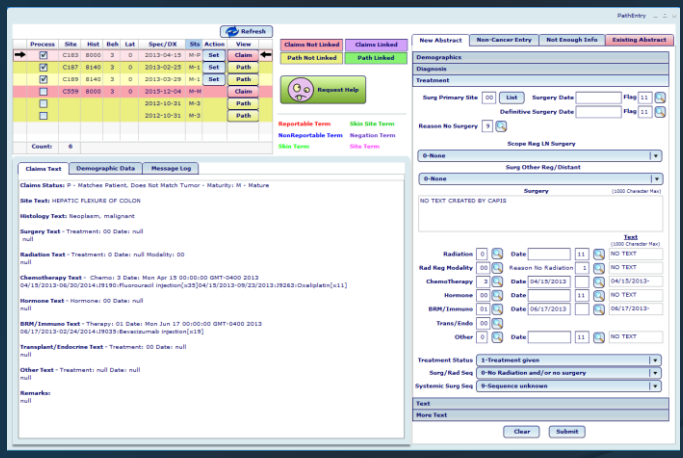
71

Results – New Incidence Abstracts



72

Results – New Incidence Abstracts



Results – New Incidence Abstracts

Dx Year	New Cases
2010	768
2011	5,968
2012	3,359
2013	8,400
2014	7,271
2015	9,455
Total	35,221

New Case by Site	New Cases
Miscellaneous Heme/Lymph Malignancies	16,944
Non-Hodgkin Lymphoma - Extranodal	4,729
Chronic Lymphocytic Leukemia	3,933
Myeloma	2,192
Aleukemic, subleukemic and NOS	1,610
Non-Hodgkin Lymphoma - Nodal	1,084
Breast	1,021
Chronic Myeloid Leukemia	889
Acute Myeloid Leukemia	539
Other Lymphocytic Leukemia	472
Urinary Bladder	258
Melanoma of the Skin	252
Prostate	228

Update on Meaningful Use

Meaningful Use Cancer Reporting in Florida

Florida Cancer Data System Annual Meeting
Orlando, FL
July 26th, 2017

75

Meaningful Use Overview

The American Recovery and Reinvestment Act, enacted in February 2009, includes many measures to modernize our nation's infrastructure, one of which is the Health Information Technology for Economic and Clinical Health (HITECH) Act. The HITECH Act supports the concept of electronic health records-meaningful use (EHR-MU), an effort led by the Centers for Medicare & Medicaid Services (CMS) and the Office of the National Coordinator for Health IT (ONC). HITECH proposes the meaningful use of interoperable electronic health records throughout the United States' health care delivery system as a critical national goal.

CMS establishes the criteria that eligible professionals (EPs) and hospitals as well as critical access hospitals must meet to qualify for Medicare and/or Medicaid electronic health record (EHR) incentive payments as they adopt, implement, upgrade, or demonstrate meaningful use of certified EHR technology. ONC establishes the standards, implementation specifications, and certification criteria for EHR technology that will support implementation of the Stage 2 criteria described by CMS. The criteria and standards for Stage 2 Meaningful Use Final Rules released by the ONC and CMS were published in the *Federal Register* on September 4, 2012.

CMS.gov
Centers for Medicare & Medicaid Services

HealthIT.gov

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Implementation Guide for Ambulatory Healthcare Provider Reporting to Central Cancer Registries

HL7 Clinical Document Architecture (CDA)

Release 1.1

March 2014

76

What is MU?

Meaningful Use Definition & Objectives

Meaningful Use Defined

Meaningful use is using certified electronic health record (EHR) technology to:

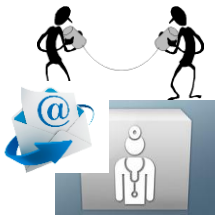
- Improve quality, safety, efficiency, and reduce health disparities
- Engage patients and family
- Improve care coordination, and population and public health
- Maintain privacy and security of patient health information

Ultimately, it is hoped that the meaningful use compliance will result in:

- Better clinical outcomes
- Improved population health outcomes
- Increased transparency and efficiency
- Empowered individuals
- More robust research data on health systems

Meaningful use sets specific objectives that eligible professionals (EPs) and hospitals must achieve to qualify for Centers for Medicare & Medicaid Services (CMS) Incentive Programs.

Ongoing Follow-up and Feedback



SFTP

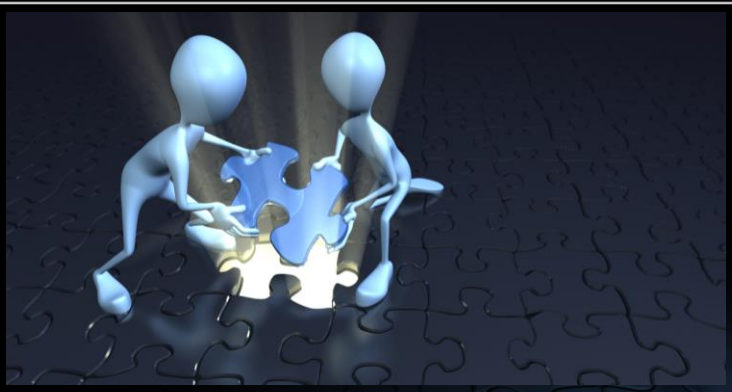
- Monthly review of onboarding status
- Communication with practice throughout process
- Check for file submissions/validate
- Send quality report
- Track Follow-up status in database

78

Future Steps

- Incorporate MU abstracts into workflow
- Integrate into FCDS claims/pathology workflow
- Streamline data validation and integration into registry database
- Continue to work with providers for registration, onboarding, and audit documentation.

79



FCDS IDEA Follow Up System "A Refresher"

Gary M. Levin, CTR, BA

FCDS Annual Conference

July 26th, 2017

80

Facility Follow Up System
Usage Statistics

Year	# Users	Requests
2014	23	215,155
2015	18	139,352
2016	17	334,776
2017	10	80,754
Total	68	770,037
Unique Users	43	

81

Facility Follow Up System
Concepts

- Purpose: Assist Facilities with Patient Follow Up
- Facility Provides Facility, Accession, Sequence #
- System Validates and Returns Consolidated Patient and Tumor Information for the requested cases
- Results can vary from facility case since it is based on consolidation from many reporting sources

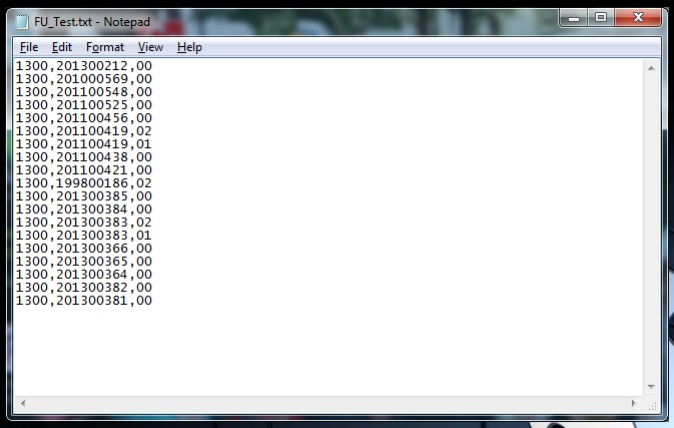
82

Facility Follow Up System
Concepts - Input

NAACCR Data Item	Field Name
540	Reporting Facility
550	Accession Number--Hosp
560	Sequence Number--Hosp

83

Facility Follow Up System
How To Use – Input File



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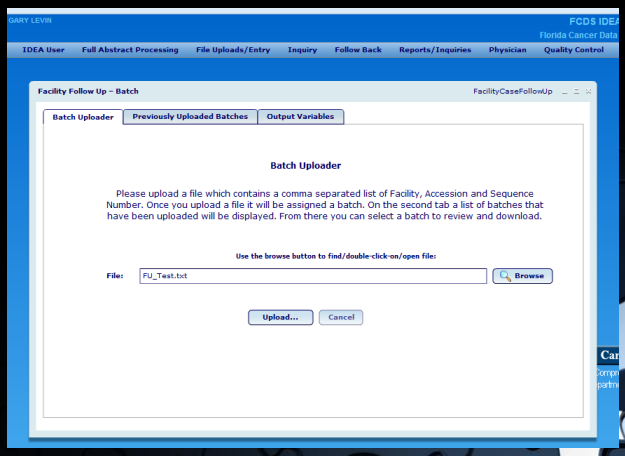
Facility Follow Up System
How To Use



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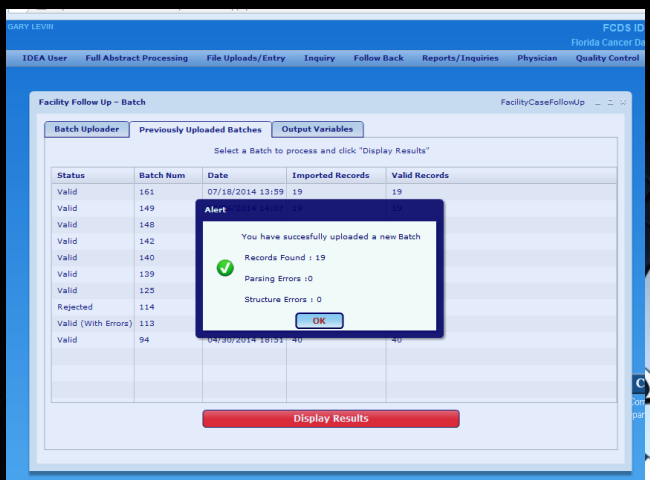
Facility Follow Up System
How To Use



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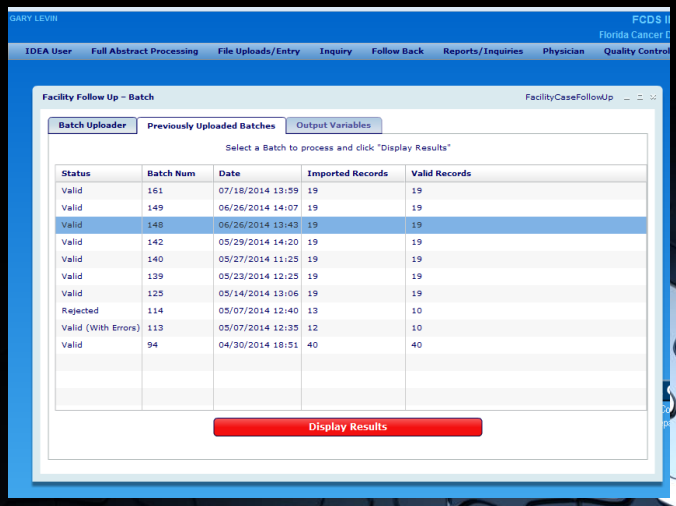
Facility Follow Up System
How To Use



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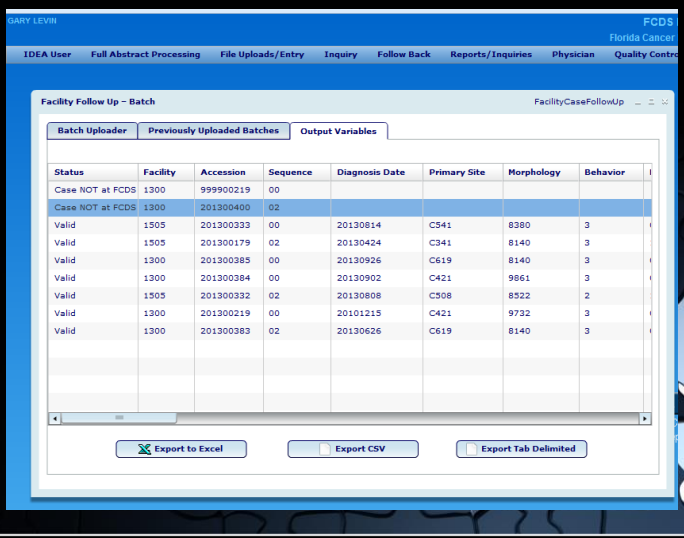
Facility Follow Up System
How To Use



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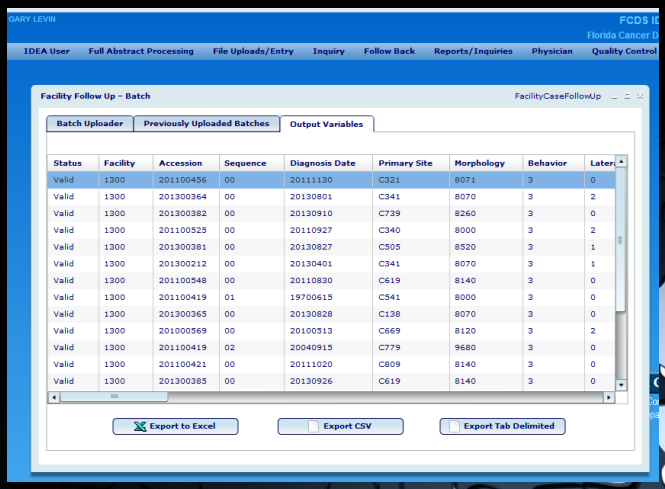
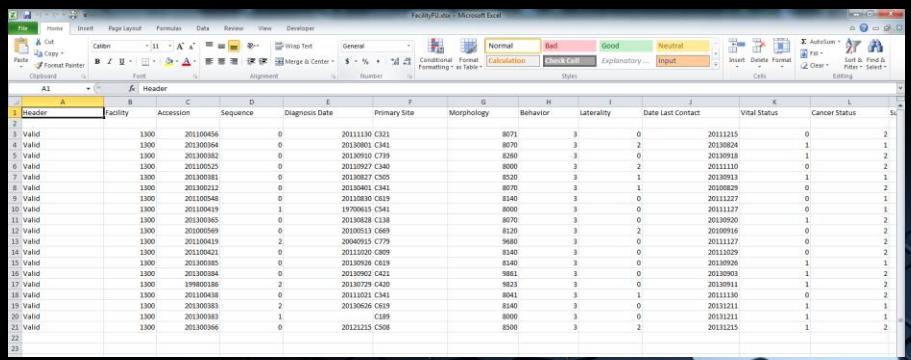
Facility Follow Up System
How To Use



Status	Facility	Accession	Sequence	Diagnosis Date	Primary Site	Morphology	Behavior	Later
Valid	1300	201100456	00	20111130	C321	8071	3	0
Valid	1300	201300364	00	20130801	C341	8070	3	2
Valid	1300	201300382	00	20130910	C739	8260	3	0
Valid	1300	201100525	00	20110927	C340	8000	3	2
Valid	1300	201300381	00	20130827	C505	8520	3	1
Valid	1300	201300212	00	20130401	C341	8070	3	1
Valid	1300	201100548	00	20110830	C619	8140	3	0
Valid	1300	201100419	01	19700615	C541	8000	3	0
Valid	1300	201300365	00	20130828	C138	8070	3	0
Valid	1300	201000569	00	20100513	C669	8120	3	2
Valid	1300	201100419	02	20040915	C779	9680	3	0
Valid	1300	201100421	00	20111020	C809	8140	3	0
Valid	1300	201300385	00	20130926	C619	8140	3	0

89

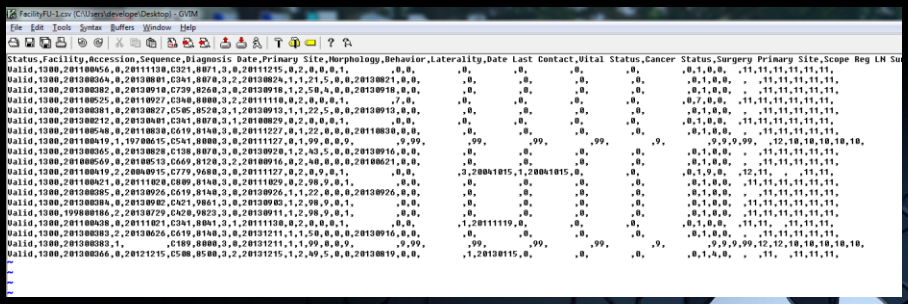
Facility Follow Up System
How To Use - Excel Format



Header	Facility	Accession	Sequence	Diagnosis Date	Primary Site	Morphology	Behavior	Laterality	Date Last Contact	Vital Status	Cancer Status
Valid	1300	201100456	0	20111130	C321	8071	3	0	20111215	0	2
Valid	1300	201300364	0	20130801	C341	8070	3	2	20130824	1	1
Valid	1300	201300382	0	20130910	C739	8260	3	0	20130918	1	2
Valid	1300	201100525	0	20110927	C340	8000	3	2	20111110	0	2
Valid	1300	201300381	0	20130827	C505	8520	3	1	20130913	1	1
Valid	1300	201300212	0	20130401	C341	8070	3	1	20100829	0	2
Valid	1300	201100548	0	20110830	C619	8140	3	0	20111227	0	1
Valid	1300	201100419	1	19700615	C541	8000	3	0	20111127	0	1
Valid	1300	201300365	0	20130828	C138	8070	3	0	20130920	1	2
Valid	1300	201000569	0	20100513	C669	8120	3	2	20100916	0	2
Valid	1300	201100419	2	20040915	C779	9680	3	0	20111127	0	2
Valid	1300	201100421	0	20111020	C809	8140	3	0	20111029	0	2
Valid	1300	201300385	0	20130926	C619	8140	3	0	20130926	1	1
Valid	1300	201300384	0	20130902	C421	9861	3	0	20130903	1	2
Valid	1300	199800186	2	20130729	C420	9823	3	0	20130911	1	2
Valid	1300	201100438	0	20111021	C341	8041	3	1	20111130	0	2
Valid	1300	201300383	2	20130626	C619	8140	3	0	20131211	1	1
Valid	1300	201300383	1		C189	8000	3	0	20131211	1	1
Valid	1300	201300366	0	20121215	C508	8500	3	2	20131215	1	2

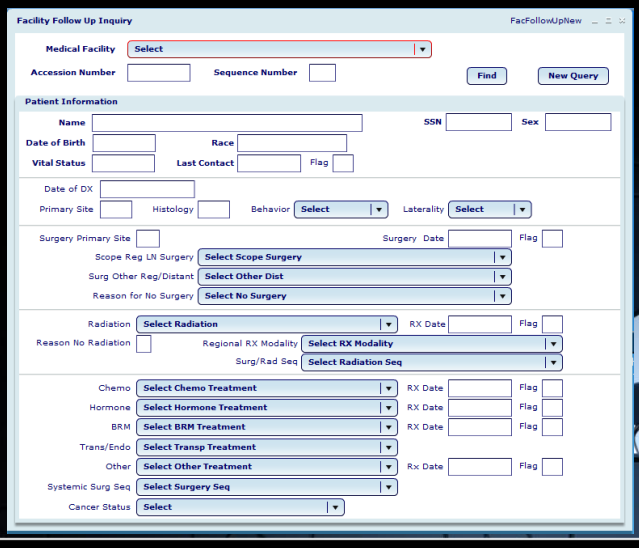
90

Facility Follow Up System
How To Use - CSV Format



91

Facility Follow Up System
How To Use – Single Case Inquiry



92

National Program of Cancer Registries
2016 Data Quality Evaluation

Diagnosis years: 2008-2014

Contract Number: 200201461258003

FCDS Annual Meeting

July 26, 2017

Meg Herna, CTR
Steven Peace, CTR

CDC CENTER FOR DISEASE CONTROL AND PREVENTION

NPCR NATIONAL PROGRAM OF CANCER REGISTRIES

FCDS Florida Statewide Cancer Registry
Florida Cancer Data System

93

Methodology

- FCDS prepared two extract files:
  - Diagnosis years 2008-2014
  - Primary sites of breast, colon, prostate, lung, bladder, and melanoma of the skin
  - Behavior 2 or 3
- A random sample of 438 cases were selected from the submitted data file.
  - These 438 cases were reconsolidated and compared to FCDS consolidated cases.
  - Cases were reviewed for the accuracy of code against the supporting text.
- Breast and colon cases were also run through the NPCR Clinical Check Edits to evaluate reported prognostic and treatment items for cancer cases with specific tumor characteristics.

94

Data Elements Reviewed

20 Patient ID Number
40 RegistryID
380 Sequence Number--Central
390 Date of Diagnosis
400 Primary Site
410 Laterality
440 Grade
522 Histologic Type ICD-O-3
523 Behavior Code ICD-O-3
540 Reporting Facility
820 Regional Lymph Nodes Positive+
830 Regional Lymph Nodes Examined+
1200 RX Date – Surgery
1201 RX Date — Surgery Flag#
1210 RX Date—Radiation
1211 RX Date—Radiation Flag#
1220 RX Date—Chemo
1221 RX Date—Chemo Flag#
1230 RX Date—Hormone
1231 RX Date—Hormone Flag#
1240 RX Date — BRM
1241 RX Date — BRM Flag#
1250 RX Date — Other
1251 RX Date — Other Flag#
1260 Date of Initial RX—SEER
1261 Date of Initial Rx-SEER Flag#
1270 Date of 1st Crs RX—CoC
1271 Date of 1st Crs RX—CoC Flag#
1290 RX Summ—Surg Prim Site
1292 RX Summ—Scope Reg LN Sur
1294 RX Summ—Surg Other Reg/Dis

95

Data Elements Reviewed

1360 Rx Summ—Radiation
1390 RX Summ—Chemo
1400 RX Summ—Hormone
1410 RX Summ—BRM
1420 RX Summ—Other
1570 Rad—Regional RX Modality
2520 Text—DX Proc—PE
2530 Text—DX Proc—X-ray/Scan
2540 Text—DX Proc—Scopes
2550 Text—DX Proc—Lab Tests
2560 Text—DX Proc—Op
2570 Text—DX Proc--Path
2580 Text—Primary Site Title
2590 Text—Histology Title
2600 Text—Staging
2620 RX Text—Radiation (Beam)
2630 RX Text—Radiation Other
2640 RX Text—Chemo
2650 RX Text—Hormone
2660 RX Text—BRM
2670 RX Text—Other
2680 Text—Remarks
2800 CS Tumor Size+
2810 CS Extension+
2830 CS Lymph Nodes+
2850 CS Mets at Dx+
2880 CS Site Specific Factor 1+
2900 CS Site Specific Factor 3+
3020 Derived SS2000
3250 RX Summ—Transplnt/Endocr

96

Number of Data Elements Reviewed by Site

Site	Number of Data Elements (a)	Number of Abstracts (b)	Total Number of Data Elements (abstract-level) (c = a * b)	Number of Consolidated Tumors (d)	Total Number of Data Elements Audited (tumor-level) (e = a * d)
Bladder	23	160	3,680	73	1,679
Breast	23	158	3,634	73	1,679
Colon	23	151	3,473	73	1,679
Lung	23	154	3,542	73	1,679
Melanoma	23	154	3,542	73	1,679
Prostate	23	153	3,519	73	1,679
Total	**138**	**930**	**21,390**	**438**	**10,074**

97

DQE Results Case Consolidation

- Of a total of 10,074 possible data elements that could had errors, only 89 data elements (0.9%) were found to have errors.
- Data accuracy rate was 99.1%.

98

DQE Results
Frequency of multiple primary errors across all sites

Total number of cases analyzed	Number of cases with no errors	Number of cases with error	Accuracy proportion
1057	1015	43	96.0%
Total number of patient level records analyzed	**Number of patients with no errors**	**Number of patients with error**	**Accuracy proportion**
400	372	28	93.0%

99

NPCR DQE Results

FCDS's overall data accuracy rate of merged data was 99.1 percent; FCDS is to be commended for this result.

100

Florida Cancer Data System

2016 FCDS Lung Audits

(DX = 2014 or 2015)

101

FCDS ANNUAL CONFERENCE
ORLANDO, FLORIDA
7/27/2016

STEVEN PEACE, CTR
MEG HERNA, CTR

2016 Audit Process

102

FCDS DATA VALIDATION AUDIT with E-PATH VERIFICATION 11/1/2016

FCDS DATA VALIDATION AUDIT with E-PATH VERIFICATION

Diagnosis Year: 2014 or 2015

Cancer Site: Lung

Hospital Analytic Cases Only

Facilities: Appendix A

FCDS DATA VALIDATION AUDIT with E-PATH VERIFICATION 11/1/2016

TABLE OF CONTENTS

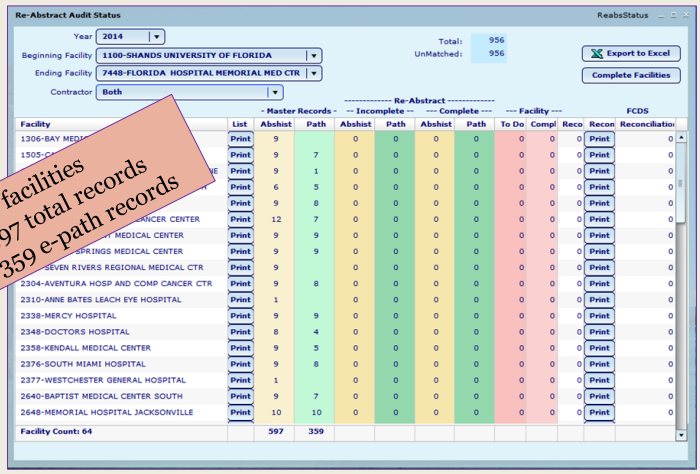
Page

3. ELIGIBILITY

- Facilities will be selected according to enhanced 5-year selection criteria as well as stratified by 2014 reporting year caseload for each primary site to be audited (primary lung cancer).
- A facility may be selected for more than 1 audit during the 5-year cycle using the enhanced facility select criteria.
- Case Selection will be based upon the following criteria:
  - Date of Diagnosis 01/01/2014-12/31/2014 or Date of Diagnosis 01/01/2015-12/31/2015
  - Primary Site = C34.0-C34.9 (lung)
  - Behavior = 2 (in-situ) or 3 (malignant)
  - Central Sequence = 00 (only 1 cancer ever reported)
  - ICD-O-3 Histology Not = 9590-9992 (no lymphoma, leukemia, or other hematopoietic malignancy)
  - Class of Case = 10, 11, 12, 13, 14, 20, 21, 22 (hospital analytic – diagnosed and/or treated at facility)
- Case Selection will stratified by 2014 or 2015 reporting year caseload for primary lung cancer from calendar year 2014 or 2015 diagnoses.
- Pathology Selection will be 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) as documented/coded on the original case abstract.

2014 Selected Facilities & Cases

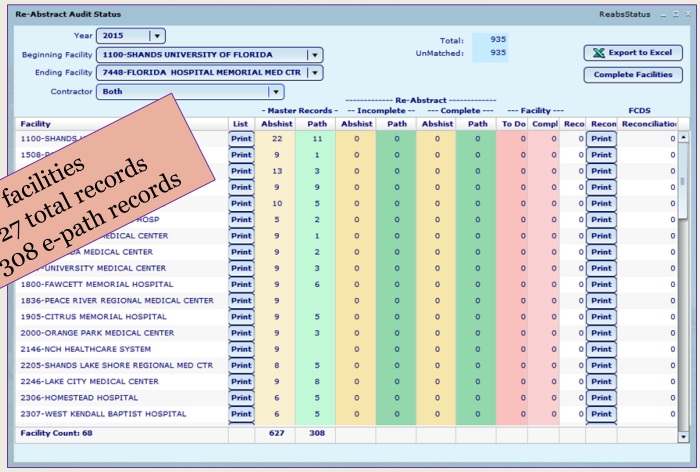
103



- 64 facilities
- 597 total records
- 359 e-path records

2015 Selected Facilities & Cases

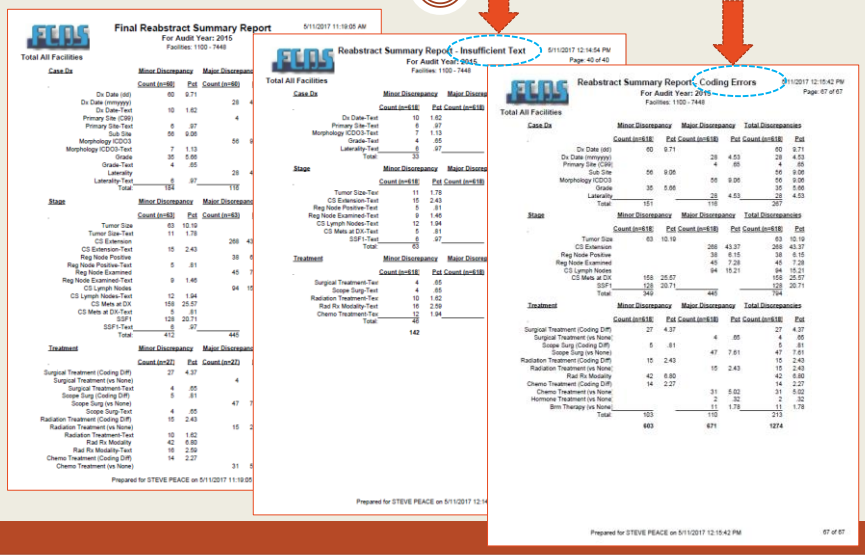
104



- 68 facilities
- 627 total records
- 308 e-path records

Audit Summary Reports

105



Audit Summary Reports

106

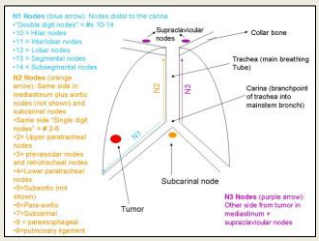
FCDS 2016 Data Validation and E-Pathology ReAbstract Audit
Report Key
(Major, Minor and Text Errors Defined By Section of Audit Report)

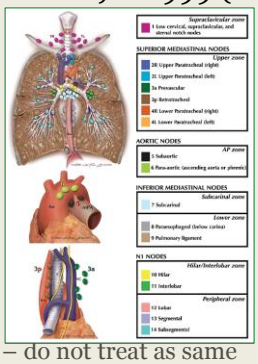
Major Error	Minor Error	Text Error
Major Errors are errors that may result in significant changes to the case or may alter core data or key information on the case	Minor Errors are errors that will not result in significant changes to the case or will not alter core data/key information on a case	Text Errors are errors found in recoding data from original text, only. The original text resulted in minor coding or other error that was later resolved at time of facility reconciliation when text was provided after-the-fact
Example: *Date of Diagnosis after final reconciliation was different by more than 1 month*	***Example:*** *Date of Diagnosis after final reconciliation was different by less than 30 days*	***Example:*** *There was no text documentation to identify the correct Date of Diagnosis – However, at the time of facility reconciliation sufficient text was provided to verify the dx date*
Case Diagnosis Data Items		
Date of Dx > 1 month	**Date of Dx < 1 month**	**Any Tumor Item Noted as - Text**
Laterality	**Primary Sub Site Code**	*(Indicates text incomplete)*
Morphology	**Grade Value**	
Behavior		
Stage at Diagnosis and Stage-Related Data Items		
CS Tumor Size/Extension	**Tumor Size Value**	**Any Stage Item Noted as - Text**
CS Lymph Nodes	**# Regional Nodes Positive**	*(Indicates text incomplete)*
CS Mets at Dx	**# Regional Nodes Examined**	
	Any Site Specific Factor Code	

Audit Technical Summary Report

107

- Tumor Size 000 (no evidence of primary tumor) vs. 999 (unk)
- Several Regional Lymph Node Issues
  - N1, N2 and N3 are ALL "regional lymph nodes"



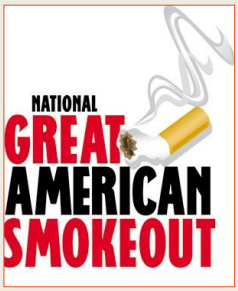


  - Must look at whether hilar or mediastinal nodes – do not treat as same
  - Coding FNA of Regional Lymph Node in Scope of Reg Lymph Node Surgery
  - Coding Regional Lymph Nodes Examined / Regional Lymph Nodes Positive
  - Disconnect between Surgery of Primary Site Code 30 versus 33 and "regional" node definitions – often code 33 is for mediastinal node removal

Webcast: Lung Cancer Data Quality & Staging

108

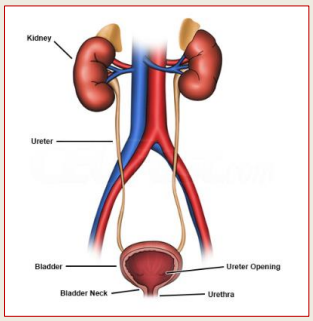
- FCDS Webcast on **11/16/2017**
- Lung Cancer Facts
- FCDS Audit Findings
- FCDS Audit Recommendations
- Review of Lung Anatomy for Staging
- Review of Lung Cancer Staging Issues
  - SS2000 and SS2018
  - AJCC 7th edition
  - AJCC 8th edition
  - SSFs - Site Specific Items Required for Staging
- Staging & Site Specific Items - Practice Cases
- Latest Research
- Q&A



2017 Audit Plan

109

- Genitourinary System
  - Kidney
  - Bladder
  - Prostate
- 2016 Diagnosis Year
- Analytic Cases Only
- ~65 Facilities
- ~500 cases
- Sample will include free-standing radiation therapy centers



- FOCUS: Grade Rules, MPH Rules, Staging, Treatment

FCDS Florida Cancer Data System

2018 Updates to National Standards

110

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ORLANDO, FLORIDA
7/26/2017

STEVEN PEACE, CTR

- ICD-O-3 New Histology Codes
- ICD-O-3 Behavior Changes
- Solid Tumor MPH Rules & DB
- AJCC 8th edition
- SSF Items - Major Change
- New Treatment Items

- SS2018 & EOD 2018
- Gene Testing
- Biomarkers
- CAP Templates
- EDITSv18
- 'yp' & 'yc' TNM

Presentation Outline

111

- 2018 – A Year for Major Changes to Data Standards
- Major Changes to Site-Specific Data Items
- Many New Treatment Data Items
- Many New Staging Data Items
- 2018 Solid Tumor Rules
- 2018 Solid Tumors Database
- ICD-O-3 Code & Behavior Updates
- Updates to Reportable Cancers List
- Cancer Staging Updates
  - AJCC 8th ed. Implementation
  - SEER EOD 2018
  - SS2018
- EDITS v18
- Medicare Beneficiary Identifier (MBI) replaces SSN for CMS Billing

Major Changes to Site-Specific Data Items

112

New Data Items – Old SSFs
New Codes & Instructions

- FIGO Stage
- Lymph Nodes Laterality-Vulva
- Lymph Nodes Laterality-Vagina
- Lymph Nodes Assessment Method Para-aortic-Vagina
- Lymph Nodes Assessment Method Pelvic-Vagina
- Lymph Nodes Assessment Method Femoral-Vagina
- Lymph Nodes Distant: Mediastinal, Scalene SSF 6-Vagina
- Lymph Nodes Distant: Mediastinal, Scalene SSF 7-Vagina
- Peritoneal Cytology-Corpus
- Pelvic Nodes Number Positive SSF3-Corpus
- Pelvic Nodes Number Positive SSF4-Corpus
- Para-aortic Nodes Number Positive SSF 5-Corpus
- Para-aortic Nodes Number Examined SSF 6-Corpus
- CA-125 Pretreatment Value SSF1-Ovary

New Data Items – Old SSFs
New Codes & Instructions

- Prostate Pathological Extension SSF3-Prostate
- Gleason's Pattern Clinical SSF7-Prostate
- Gleason's Clinical Score SSF8-Prostate
- Gleason Pathological Patterns SSF9-Prostate
- Gleason Pathological Score SSF10-Prostate
- Gleason Tertiary Pattern SSF11-Prostate
- Number of Cores Positive SSF12-Prostate
- Number of Cores Examined SSF13-Prostate
- AFP Pre-Orchiectomy Range SSF7-Testis
- hCG Pre-Orchiectomy Range SSF9-Testis
- LDH Pre-Orchiectomy Range SSF10-Testis
- AFP Post-Orchiectomy Range SSF13-Testis
- hCG Post-Orchiectomy Range SSF15-Testis
- LDH Post-Orchiectomy Range SSF16-Testis

New Manual to Include ALL Site-Specific Data Items
New Optional Prognostic Data Items Not Approved Yet
Description of Test, Instructions and Codes

Many New Prognostic Site-Specific Fields

113

- HER2 ISH Dual Probe Ratio, new Draft, Breast 8th edition, CAP guidelines
- HER2 ISH Dual Probe Copy Number
- HER2 ISH Single Probe Copy Number
- Lymph Nodes Size of Metastasis,Head and Neck (Common SSF), SSF#1
- Bilirubin Pretreatment Total Lab Value, Liver, SSF #6
- Measured Basal Diameter, Uveal Melanomas, SSF #2
- Measured Thickness, Uveal Melanomas, SSF #3
- Extranodal Extension Clinical, Penis, SSF # 17
- Extranodal Extension Pathological, Penis, SSF # 17
- Microvascular Density, Uveal Melanomas, SSF #13
- Adenoid Cystic Basaloid Pattern, Lacrimal Gland, SSF #6
- Circumferential or Radial Resection Margin, Colon and Rectum, SSF #6
- Oncotype Dx Recurrence Score-Invasive, Draft, Breast 8th edition, CAP guidelines
- Oncotype Dx Recurrence Score-DCIS, Draft, Breast 8th edition, CAP guidelines
- Oncotype Dx Risk Level-Invasive, Draft, Breast 8th edition, CAP guidelines
- Oncotype Dx Risk Level-DCIS, Draft, Breast 8th edition, CAP guidelines
- Isolated Tumor Cells (ITC) in Regional Lymph Node(s), Merkel Cell Skin, SSF #18
- Profound Immune Suppression,Merkel Cell Skin, SSF #22
- Microsatellite Instability, Colon and Rectum, SSF #7
- KRAS, Colon and Rectum, SSF #9
- Kidney Tumor Extension, Kidney, SSF#1
- Major vein Involvement, Kidney, SSF#2
- Ipsilateral Adrenal Gland Involvement, Kidney, SSF#3
- Sarcomatoid Features, Kidney, SSF#4
- JAK2, Heme Retic, SSF# 1

Many New Treatment Data Items

114

Radiation
Phase I Radiation Primary Treatment Volume (length 2)
Phase I Radiation to Draining Lymph Nodes (length 2)
Phase I Radiation Treatment Modality (length 2)
Phase I Radiation External Beam Planning Technique (length 2)
Phase I Dose Per Fraction (Session) (length 5)
Phase I Number of Fractions (Sessions) (length 3)
Phase I Total Dose (length 6)
Phase II Radiation Primary Treatment Volume (length 2)
Phase II Radiation to Draining Lymph Nodes (length 2)
Phase II Radiation Treatment Modality (length 2)
Phase II Radiation External Beam Planning Technique (length 2)
Phase II Dose Per Fraction (Session) (length 5)
Phase II Number of Fractions (Sessions) (length 3)
Phase II Total Dose (length 6)
Phase III Radiation Primary Treatment Volume (length 2)
Phase III Radiation to Draining Lymph Nodes (length 2)
Phase III Radiation Treatment Modality (length 2)
Phase III Radiation External Beam Planning Technique (length 2)
Phase III Dose Per Fraction (Session) (length 5)
Phase III Number of Fractions (Sessions) (length 3)
Phase III Total Dose (length 6)
Number of Phases of Radiation Treatment to this Volume (length 2)
Radiation Discontinued Early (Length 2)
Total Dose (length 6)

CONVERSION Required

StORE		
FORDS Codes	StORE Code	Definition
00	00	No Radiation Treatment
21	01	External beam, photons, low energy
22, 23, 24, 25, 26, 27, 31, 41, 42, 43	02	External beam, photons, megavoltage
40	03	External beam, protons
28	04	External beam, electrons
30	05	External beam, neutrons
20	06	External beam, carbon ions
29	09	External beam, NOS
51	10	Brachytherapy, intracavitary, LDR
52	11	Brachytherapy, intracavitary, HDR
53	12	Brachytherapy, Interstitial, LDR
54	13	Brachytherapy, Interstitial, HDR
	14	Brachytherapy, electronic
50	19	Brachytherapy, NOS
55*	20	Radioisotopes, Radium-232
61	21	Radioisotopes, Strontium,-89
62	22	Radioisotopes, Strontium-90
55, 60	29	Radioisotopes, NOS
98	98	Other, NOS
99	99	Unknown

FORDS to StORE Code Conversions

115

FORDS Code	Label	StORE Volume	StORE Nodes
00	No radiation treatment	00	00
01	Eye/orbit	10	00
02	Pituitary	11	00
03	Brain (NOS)	12	00
04	Brain (limited)	13	00
05*	Head and neck (NOS)	29	99
06*	Head and neck (limited)	29	99
07	Glottis	23	00
08	Sinuses	24	99
09	Parotid	25	99
10	Chest/lung (NOS)	39	99
11	Lung (limited)	30	99
12	Esophagus	50	99
13	Stomach	51	99
14	Liver	56	00
15	Pancreas	58	99
16	Kidney	62	00
17	Abdomen (NOS)	59	00
18	Breast	40	00
19	Breast/lymph nodes	40	04
20	Chest wall	42	00
21	Chest wall/lymph nodes	42	04
22	Mantle, Mini-mantle	03	00
23	Lower extended field	07	00
24	Spine	81	00
25	Skull	80	00
26	Ribs	83	00
27	Hip	84	00

Old Code	New Code	Label
	00	No radiation treatment
	01	Neck lymph node regions
	02	Thoracic lymph node regions
	03	Neck and thoracic lymph node regions
	04	Breast/ Chestwall lymph node regions
	05	Abdominal lymph nodes
	06	Pelvic lymph nodes
	07	Abdominal and pelvic lymph nodes
	09	Lymph node region, NOS
1	10	Eye/orbit/optic nerve
2	11	Pituitary
3	12	Brain
4	13	Brain (Limited)
40	14	Spinal cord
	20	Nasopharynx
	21	Oral Cavity
	22	Oropharynx
	23	Larynx (glottis) or hypopharynx
8	24	Sinuses/Nasal tract
9	25	Parotid or other salivary glands
50	26	Thyroid
5	29	Head and neck (NOS)
	30	Lung or bronchus
	31	Mesothelium
	32	Thymus

2018 Solid Tumor Rules

116

- Text Only – no flowchart or matrix
- Updates to Existing Solid Tumor Rules
- Takes into account problems from 2007 MPH Rules
- Takes into account WHO Classification Updates
- Takes into account new WHO Classification, 4th ed.

2018 Solid Tumors Database

117

- Genetics Data & Biomarkers
- Treatment(s)
- Abstractor Notes
- Signs & Symptoms
- Diagnostic Exams
- Recurrence & Metastasis
- Epidemiology & Mortality

STDB Example: Metaplastic Ca

Name
Metaplastic carcinoma

ICD-O-3 Morphology
8575/3 Effective 2001 and later

Reportable
for cases diagnosed 2001 and later

Help me code for diagnosis year: 2001 and later

Site Category
Breast

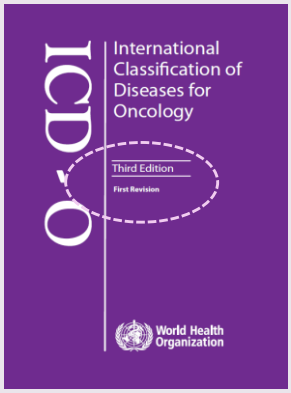
Definition
Metaplastic carcinoma encompasses a group of neoplasms characterized by differentiation of the neoplastic epithelium into squamous cells and/or mesenchymal-looking elements, including but not restricted to spindle, chondroid, osseous, and rhabdomyoid cells. These neoplasms may be either entirely composed of metaplastic elements, or a complex admixture of carcinoma and metaplastic areas.

Differential diagnosis:
- Myoepithelial carcinoma: may have ducts with prominent myoepithelial cells at periphery, diffusely S100+
- Myofibroblastic tumors
- Phyllodes tumor
- Primary breast sarcoma: no epithelial elements or keratin+ elements

CANCER MOONSHOT

ICD-O-3 Code & Behavior Updates

119

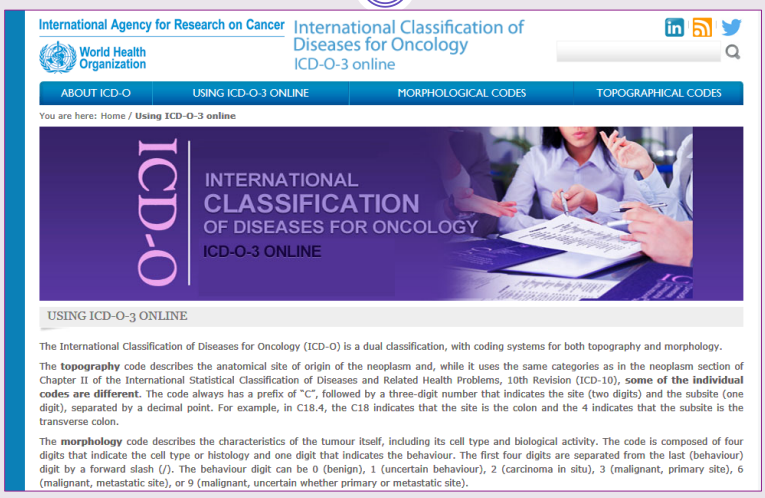


WHO Classification of Tumors New or Revised Since 2010
Digestive System (2010)
Breast (2012)
Soft Tissue and Bone (2013)
Female Reproductive Organs (2014)
Lung, Pleura, Thymus & Heart (2015)
Urinary System & Male Genital (2016)
Central Nervous System (2016 revision)
Hematopoietic & Lymphoid (2016 revision)
Head & Neck (2017)

http://codes.iarc.fr/usingicdo.php

ICD-O-3 Code & Behavior Updates

120



ICD-O-3 Code & Behavior Updates

121

ICD-O-3 Code & Behavior Updates

122

- 24+ NEW proposed ICD-O Codes
- 16+ Changes to Behavior Codes
- 54+ Preferred Names / Alternate Names
- Previously non-reportable GI terms now Reportable
- Thymoma – no longer must state “malignant”

ICD-O-3 Updates - Breast

123

Change	Code	Description
New behavior code	8507/3	Invasive micropapillary carcinoma
New behavior code	8983/3	Adenomyoepithelioma with carcinoma
New code	8519/2	Pleomorphic lobular carcinoma in situ
New behavior code	8460/2	Serous borderline tumor-micropapillary variant/
New behavior code	8460/2	Non-invasive low grade seorous carcinoma
New related term	8503/2	Intraductal papilloma with ductal carcinoma in situ
New code	8509/2	Solid papillary carcinoma in-situ
New code	8509/3	Solid papillary carcinoma with invasion
New related term	8503/3	Invasive papillary carcinoma

ICD-O-3 Updates - Lung

124

Change	Code	Description
New related term	8551/3	Acinar adenocarcinoma
New behavior code	8250/2	Minimally invasive adenocarcinoma, non-mucinous
New code	8257/3	Minimally invasive adenocarcinoma, mucinous
New code	8023/3	NUT carcinoma
New behavior code	8842/3	Pulmonary Myxoid sarcoma with EWSR1-CREB1 translocation
New code	9086/3	Germ cell tumor with associated hematological malignancy
New related term	8250/3	Lepidic adenocarcinoma
New related term	8253/3	Invasive mucinous adenocarcinoma
New related term	8254/3	Mixed invasive mucinous & non-mucinous adenocarcinoma
New term/behavior	8410/2	Adenocarcinoma in-situ,non- mucinous
New term/behavior	8253/2	Adenocarcinoma in-situ, mucinous
See comment	8140/2	Adenocarcinoma in-situ
New code	8265/3	Micropapillary adenocarcinoma
New related term	8580/3	Metaplastic thymoma
New related term	8581/3	Type A thymoma
New related term	8582/3	Type AB thymoma
New related term	8583/3	Type B1 thymoma
New related term	8584/3	Type B2 thymoma
New related term	8585/3	Type B3 thymoma
New related term	8580/3	Sclerosing thymoma

Updates to Reportable Cancers List

125

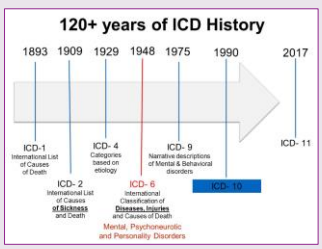
Code	Term
8507/3	Invasive micropapillary carcinoma
8983/3	Adenomyoepithelioma with carcinoma
8460/3	Serous borderline tumor-micropapillary variant Non-invasive low grade serous carcinoma
8441/2	Serous tubal intraepithelial carcinoma
8380/2	Atypical hyperplasia/Endometrioid intraepithelial neoplasia
8825/3	Low-grade myofibroblastic sarcoma
8842/3	Ossifying fibromyxoid tumor, malignant
8811/1	Myxoinflammatory fibroblastic sarcoma (MIFS)
8250/2	Minimally invasive adenocarcinoma, non-mucinous
8842/3	Pulmonary Myxoid sarcoma with EWSR1-CREB1 translocation
8311/3	Hereditary leiomyomatosis & RCC-associated RCC MiT Family translocation renal cell carcinoma (Important note: this histology IS NOT a synonym for hereditary leiomyomatosis & RCC assoc RCC also coded 8811/3
8071/2	Differentiated penile intraepithelial neoplasia Differentiated-type vulvar intraepithelial neoplasia
8410/2	Adenocarcinoma in-situ, non- mucinous
8253/2	Adenocarcinoma in-situ, mucinous
8620/3	Adult granulosa cell tumor
9341/3	Clear cell odontogenic carcinoma
9302/3	Ghost cell odontogenic carcinoma

ICD-11 and ICD-O-4

126

- ICD-10 is nearly 30 years old (1989 release)
- ICD-11 early release in 2017 (beta version)
- ICD-11 used for Death Certificates in 2018 (NCHS)
- ICD-11 uses ICD-10 as foundation + more detail
- 100% electronic will replace paper version

- ICD-O-4 in review starting in 2017
- ICD-O-4 will be compatible with ICD-11
  - Topography
  - Morphology
  - Laterality
  - Grade
  - Stage
  - Genetic Profile
  - More



AJCC 8th ed. Implementation

127

- AJCC Staging Manual, 8th edition
- New Required for Staging Site Specific Fields
- New Format for ALL Staging Site Specific Fields
- AJCC TNM Electronic Tools - API
- AJCC TNM API Availability, Licensing and Fees

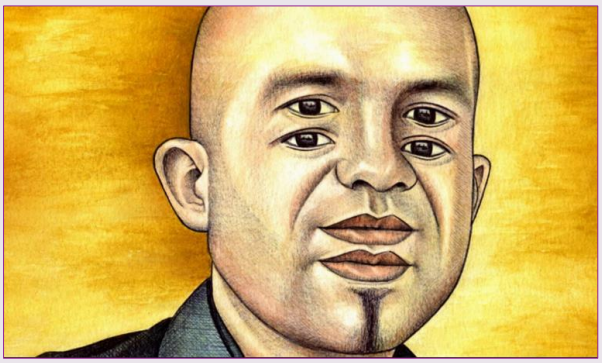
Many New Staging Data Items

128

- Summary Stage 2018 (SS2018) – Direct-Coded Stage
- New EOD Coding System - SEER EOD 2018 Data Items
  - Tumor Size Clinical
  - Tumor Size Pathologic
  - EOD Primary Tumor
  - EOD Regional Nodes
  - EOD Mets
- New Site-Specific Data Items – old SSFs + new SSFs
- New Derived Stage Data Items
  - Derived SS2018
  - Derived EOD TNM 8th T
  - Derived EOD TNM 8th N
  - Derived EOD TMM 8th M
  - Derived EOD TNM 8th Stage Group – result is a mixed stage

EDITS v18

129



Medicare Beneficiary Identifier (MBI)

130

SUBJECT: Social Security Number Removal Initiative (SSNRI)

The Centers for Medicare & Medicaid Services (CMS) is issuing this Informational Bulletin to inform states about the SSNRI. Congress passed the Medicare Access and CHIP Reauthorization Act (MACRA) of 2015 (PL 114-10) on April 16, 2015. Section 501 of MACRA requires CMS to remove Social Security Numbers from Medicare ID cards and replace existing Medicare Health Insurance Claim Numbers (HICNs) with a Medicare Beneficiary Identifier (MBI). The MBI will be a randomly generated identifier that will not include a social security number or any personally identifiable information (PII). This step is being taken to minimize the risk of identity theft for Medicare beneficiaries and reduce opportunities for fraud. To comply with this statutory requirement, starting in early 2018, CMS will issue new Medicare cards with an MBI to approximately 60 million Medicare beneficiaries, including Dual Eligibles. A HICN will still be assigned to each Medicare beneficiary will still be used for internal data exchanges between CMS and the states, but the new MBI must be used in all interactions with the beneficiary, the provider community and all external partners.

2016 Jean Byers Award

- 2016 award for 2014 data awarded in 2017!
- Criteria for the award:
  - All deadlines met with respect to the 2014 cancer case admissions
    - a. 2014 Annual Caseload Submission Deadline – June 30, 2015
    - b. Consolidated Follow Back Deadline – October 15, 2016
    - c. No more than 5% (or 35 cases, whichever number is greater) of the 2014 cancer case admissions reported to FCDS within 2 months (60 days) following the June 30, 2015 deadline.
    - d. No more than 10% of the 2014 cancer case admissions reported to FCDS within 12 months following the June 30, 2015 reporting deadline.

131

2016 Jean Byers Award

- Jean Byers Award: 91 Recipients
- Pat Strait Award: 211 Recipients

GREAT JOB!!!!

132

2016 Jean Byers Award

- Special Recognition
  - These facilities have won the award all 19 years
  - 2736 Baptist Hospital of Pensacola
  - 6203 Edward White Hospital

133

FCDS Florida Cancer Data System

2017-2018 Education & Training Plan

134

FCDS ANNUAL CONFERENCE
ORLANDO, FLORIDA
7/26/2017

STEVEN PEACE, CTR

FLccSC Fundamental Learning Collaborative for the Cancer Surveillance Community

- SS2018 & EOD
- Gene Testing
- Biomarkers
- CAP Templates

- ICD-O-3 Updates
- MPH Rules Updates
- AJCC 8th edition
- SSF Changes

2017-2018 Education & Training Plan

135

- FCDS Annual Meeting
- FCDS Webcast Schedule

- NAACCR Webinar Schedule
- NAACCR Webinar Host Sites
- NAACCR CTR Prep Webinars

- AJCC TNM 8th Edition & SSFs
- 2018 ICD-O-3 Updates for United States
- SEER 2018 MPH Rules - Solid Tumors

- FLccSC Transition
  - FCDS On-Line Educational Courses
  - FCDS Abstractor Code Testing
  - FCDS Webcast Series

FCDS Staff
In-Services for ALL Field Coordinators and Quality Control Staff

FCDS Annual Meeting

136

2017-2018 FCDS Webcast Schedule

137

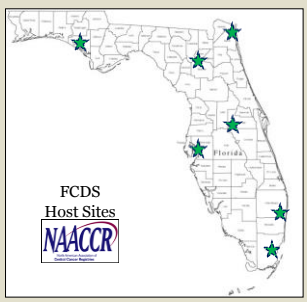
Date	Time Schedule 3rd Thursday	Presentation Title
8/17/2017	1:00pm – 3:00pm	**Convention Brief: 2017 FCDS Annual Meeting Highlights**
9/21/2017	1:00pm – 3:00pm	**Biomolecular and Genetic Tumor Profiles: Classification and Characteristics of Disease, Required SSFs, CAP Biomarker Checklists, and Targeting Treatment**
10/19/2017	1:00pm – 3:00pm	**Lymphoid & Myeloid Neoplasms: 2016 Revision of the WHO Classification & You**
11/16/2017	1:00pm – 3:00pm	**Lung Cancer: FCDS Audit Findings, Anatomy, Staging Using the AJCC 8th ed., SSF Req'd to Stage**
December	N/A	**No Webcast Scheduled**
1/18/2018	1:00pm – 3:00pm	**2018 MPH Rules: MPH Rule Updates for Solid Tumors and Introduction to the Solid Tumors Database**
2/15/2018	1:00pm – 3:00pm	**AJCC Cancer Staging Manual 8th ed. and Summary Stage 2018**

NAACCR Webinar Host Sites

138

- 7 FCDS-Hosted Sites
- Geographically Dispersed
- Registration Requested
- Encourage Attendance
- Recordings Available
- 3 CEUs per Webinar
- No Cost to Registrar/Host

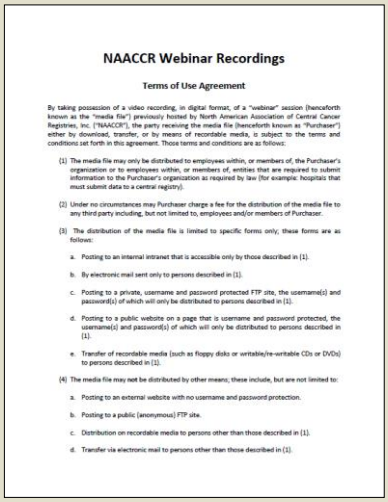
Baptist Regional Cancer Center	Jacksonville
Boca Raton Community Hospital	Boca Raton
Gulf Coast Medical Center	Panama City
H. Lee Moffitt Cancer Center	Tampa
UF Health Cancer Center Orlando Health	Orlando
Shands University of Florida	Gainesville
FCDS	Miami



NAACCR Webinar Recordings

139

- Available 24/7 on FCDS Website
- No Registration is Required
- Terms of Use Agreement
- Florida Registrars Only
- Password Protected
- Do Not Distribute
- All Materials
- CEUs



NAACCR Webinar Recordings

Terms of Use Agreement

By taking possession of a video recording, in digital format, of a "webinar" session (henceforth known as the "media file") previously hosted by North American Association of Central Cancer Registries, Inc. ("NAACCR"), the party receiving the media file (henceforth known as "Purchaser") either by download, transfer, or by means of recordable media, is subject to the terms and conditions set forth in this agreement. Those terms and conditions are as follows:

(1) The media file may only be distributed to employees within, or members of, the Purchaser's organization or to employees within, or members of, entities that are required to submit information to the Purchaser's organization as required by law (for example: hospitals that must submit data to a central registry).

(2) Under no circumstances may Purchaser charge a fee for the distribution of the media file to any third party including, but not limited to, employees and/or members of Purchaser.

(3) The distribution of the media file is limited to specific forms only; these forms are as follows:

a. Posting to an internal intranet that is accessible only by those described in (1).

b. By electronic mail sent only to persons described in (1).

c. Posting to a private, username and password protected FTP site, the username(s) and password(s) of which will only be distributed to persons described in (1).

d. Posting to a public website on a page that is username and password protected, the username(s) and password(s) of which will only be distributed to persons described in (1).

e. Transfer of recordable media (such as floppy disks or writable/re-writable CDs or DVDs) to persons described in (1).

(4) The media file may not be distributed by other means; these include, but are not limited to:

a. Posting to an external website with no username and password protection.

b. Posting to a public (anonymous) FTP site.

c. Distribution on recordable media to persons other than those described in (1).

d. Transfer via electronic mail to persons other than those described in (1).

2017-2018 NAACCR Webinar Schedule

140

Date	Time	Presentation Title
10/5/2017	9:00am - 12:00pm	Collecting Cancer Data: Prostate
11/2/2017	9:00am - 12:00pm	Collecting Cancer Data: Larynx
12/7/2017	9:00am - 12:00pm	Collecting Cancer Data: Uterus
1/4/2018	9:00am - 12:00pm	Collecting Cancer Data: GIST and Soft Tissue Sarcomas
2/1/2018	9:00am - 12:00pm	Collecting Cancer Data: Stomach and Esophagus
3/1/2018	9:00am - 12:00pm	Abstracting and Coding Boot Camp: Cancer Case Scenarios
4/5/2018	9:00am - 12:00pm	Collecting Cancer Data: Pancreas
5/3/2018	9:00am - 12:00pm	Directly Coded Stage
6/7/2018	9:00am - 12:00pm	Collecting Cancer Data: Thyroid and Adrenal Gland
7/12/2018	9:00am - 12:00pm	Hospital Cancer Registry Operations - Topic TBD
8/2/2018	9:00am - 12:00pm	Multiple Primary and Histology Rules
9/6/2018	9:00am - 12:00pm	Coding Pitfalls

NAACCR CTR Prep Webinars

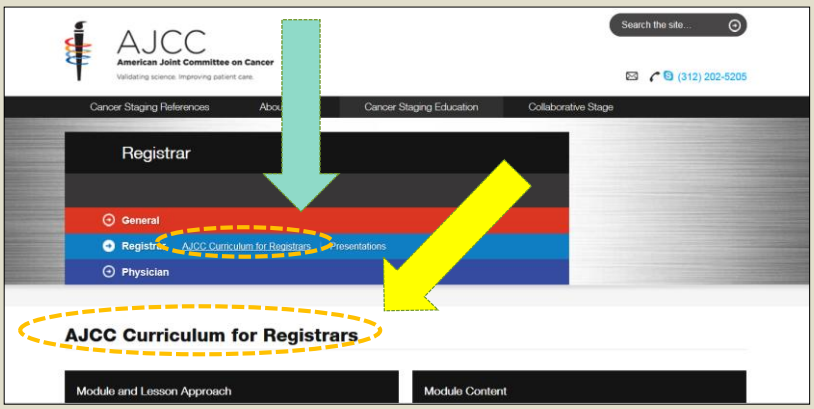
141

- The NAACCR CTR Exam Preparation & Review Webinar Series offers online instruction with experienced faculty. The course includes eight 2-hour sessions, sample CTR Exam and a follow-up post exam session. All sessions are recorded and available for playback 24/7 via Drop Box.
- Individual Subscription for the Series is $400 – includes "live" sessions
- FCDS picks up the $400 fee for any Florida candidate CTR
  - This is NOT a Beginner Abstracting Course
  - Candidate CTRs must be planning to write the CTR Exam
  - Florida candidate CTRs must view recordings as part of agreement
  - This allows you to watch each session whenever time allows
  - All Course Materials including Sample CTR Exam are included
  - Contact and Feedback from Course Instructors is included
  - Next CTR Exam Prep and Review Series begins in mid-August

AJCC TNM 8th ed. – Webinars & Self-Instruction

142

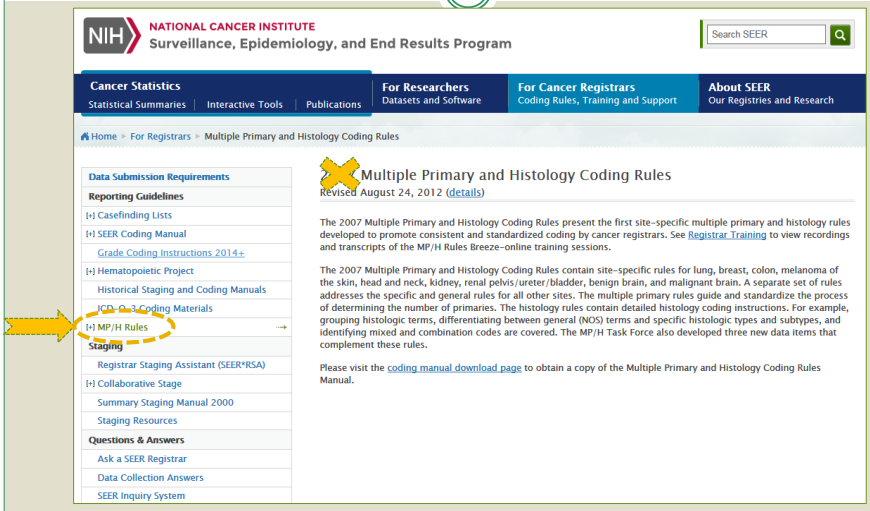
AJCC Manual Chapter and Cancer-Specific Training Webinars – Schedule TBA



https://cancerstaging.org/CSE/Registrar/Pages/AJCC-Curriculum.aspx

SEER Instruction – 2018 Solid Tumor Rules

143



FLccSC Transition

144

- Direct Access through FCDS IDEA
- Direct Interface to FCDS IDEA for FCDS Abstractor Code
- FCDS Abstractor Code Test will produce a Certificate
- All New plus Updated ABC Course will produce Certificates
- CEU Tracking System will be replaced by Certificates
- FCDS Webcast CEUs – 5 Question Quiz For Certificate
- Questions will go into the FCDS Abstractor Code Test Q&A's
- Major Revisions to ABC Course for 2018 Standards Updates

FCDS Abstractor Code Test Question Bank

145

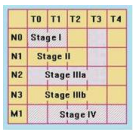
2017

Review of ALL Q&A and References
Transition FCDS Abstractor Code Test to FLccSC Learning

2018

Q&A Removed – 2007 MPH Rules, AJCC 7th ed., SS2000
Q&A Added – ICD-O-3 Updates, 2018 MPH Rules, AJCC TNM 8th ed.
SSFs Q&A Added - New Biomolecular and Genetic Tests

HOW TO USE THE AJCC CANCER STAGING MANUAL, 8TH EDITION

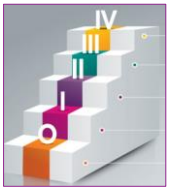


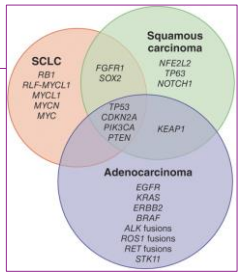
FCDS Annual Educational Conference

Orlando, Florida

July 28, 2017

Steven Peace, CTR





146

Purchase and Ordering Information

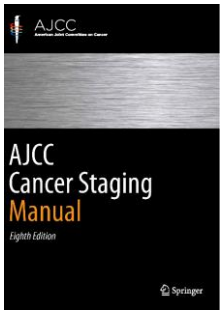
- **AJCC Cancer Staging Manual – 8th edition, 2017**
- **COST: $119.99**
- **ISBN: 978-3-319-40617-6**

- **1429 pages**
- **512 illustrations**
- **187 color illustrations**

- Required - Florida Mandate
  - FCDS will not purchase
  - Facility may purchase
  - Individual may purchase

- https://cancerstaging.org
- http://springer.com
- 1-800-SPRINGER

COMING SOON
E-book Versions
for
Amazon Kindle
Apple iBook



147

Intro to AJCC Staging Manual, 8th ed.

- Enhanced Chapter 1 – Principles of Cancer Staging
- Enhanced Descriptions of Staging Rules – Chapter 1
  - Timing for Staging
  - Clinical Staging Criteria and General Rules
  - Pathologic Staging Criteria and General Rules
  - Rules for Assigning T, N, and M Category Codes
  - Rules for Determining Prognostic Stage Group
  - Timing and Criteria for Post-Therapy Staging (yc/yp)
- 12 new staging systems
- 83 total chapters defined by site/subsite and specific histologies
- New Site-Specific Fields – no more "factors" – but similar instructions and codes

NEW

148

Intro to AJCC Staging Manual, 8th ed.

- New Sections or Features within Chapters
  - AJCC Levels of Evidence for Changes to Staging Criteria
  - Guidance on the Use of Imaging to Evaluate Stage for Each Chapter
  - Prognostic Factors
    - Factors Required to Assign Prognostic Stage Group
    - Factors Recommended for Managing Patient Care
    - Emerging Factors
  - Risk Assessment Models
  - Clinical Stratification Recommendations

- Chapter-Specific Histology Codes – No longer uses range of acceptable codes –
- Histology Code List updated with 2018 MPH Rules to ensure all new for 2018 histology codes are included in appropriate chapter(s) – and to keep up with WHO Classifications

149

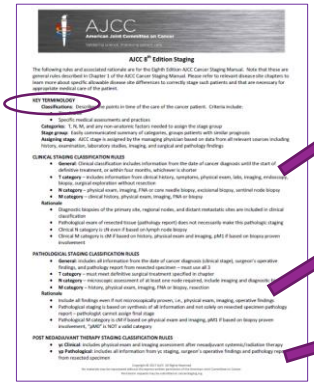
AJCC 8th Edition Staging Rules – Chapter 1

- Entire 30 pages devoted to Staging Rules and is Table-Driven with User Notes
- Definitions are included for vocabulary related to cancer staging
- Clarification on Use of "X", <blank> and Zero (0)
- Clarification on Use of Clinical & Pathological Stage Descriptors
- Clarification on "Response to Neoadjuvant Therapy"

- Explanation for How to Apply Tables to Assign New Prognostic Stage Groups
- AJCC will be hosting webinar(s) on Key Elements of Chapter 1 – General Rules
- 2018 FCDS Abstractor Code Test Absolutely WILL Have Questions from Chapter 1

150

AJCC 8th Edition Staging Rules - PDF



AJCC

American Joint Committee on Cancer

Validating science. Improving patient care.

AJCC 8th Edition Staging

The following rules and associated rationale are for the Eighth Edition AJCC Cancer Staging Manual. Note that these are general rules described in Chapter 1 of the AJCC Cancer Staging Manual. Please refer to relevant disease site chapters to learn more about specific allowable disease site differences to correctly stage such patients and that are necessary for appropriate medical care of the patient.

KEY TERMINOLOGY

Classifications: Describe the patients in time of the care of the cancer patient. Criteria include:

- Specific medical assessments and practices

Categories: T, N, M, and any non-anatomic factors needed to assign the stage group

Stage group: Easily communicated summary of categories, groups patients with similar prognosis

Assigning stage: AJCC stage is assigned by the managing physician based on data from all relevant sources including history, examination, laboratory studies, imaging, and surgical and pathology findings

CLINICAL STAGING CLASSIFICATION RULES

- **General:** Clinical classification includes information from the date of cancer diagnosis until the start of definitive treatment, or within four months, whichever is shorter
- **T category** – includes information from clinical history, symptoms, physical exam, labs, imaging, endoscopy, biopsy, surgical exploration without resection
- **N category** – physical exam, imaging, FNA or core needle biopsy, excisional biopsy, sentinel node biopsy
- **M category** – clinical history, physical exam, imaging, FNA or biopsy

Rationale

- Diagnostic biopsies of the primary site, regional nodes, and distant metastatic sites are included in clinical classification
- Pathological exam of resected tissue (pathology report) does not necessarily make this pathologic staging
- Clinical N category is cN even if based on lymph node biopsy
- Clinical M category is cM if based on history, physical exam and imaging, pM1 if based on biopsy proven involvement

PATHOLOGICAL STAGING CLASSIFICATION RULES

- **General:** includes all information from the date of cancer diagnosis (clinical stage), surgeon's operative findings, and pathology report from resected specimen – must use all 3
- **T category** – must meet definitive surgical treatment specified in chapter
- **N category** – microscopic assessment of at least one node required. Include imaging and diagnostic biopsy
- **M category** – history, physical exam, imaging, FNA or biopsy, resection

Rationale

- Include all findings even if not microscopically proven, i.e., physical exam, imaging, operative findings
- Pathological staging is based on synthesis of all information and not solely on resected specimen pathology report – pathologist cannot assign final stage
- Pathological M category is cM if based on physical exam and imaging, pM1 if based on biopsy proven involvement, "pM0" is NOT a valid category

POST NEOADJUVANT THERAPY STAGING CLASSIFICATION RULES

- **yc Clinical:** Includes physical exam and imaging assessment after neoadjuvant systemic/radiation therapy
- **yp Pathological:** Includes all information from yc staging, surgeon's operative findings and pathology report from resected specimen

CLINICAL STAGING CLASSIFICATION RULES

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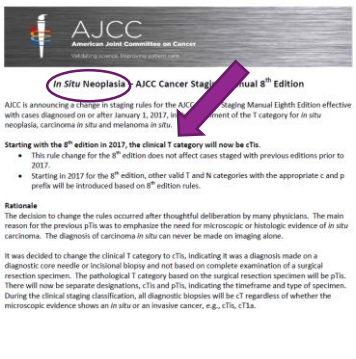
AJCC 8th Edition – Staging Clarifications



AJCC

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In Situ Neoplasia – AJCC Cancer Staging Manual 8th Edition

AJCC is announcing a change in staging rules for the AJCC Cancer Staging Manual Eighth Edition effective with cases diagnosed on or after January 1, 2017, in the assignment of the T category for *in situ* neoplasia, carcinoma *in situ* and melanoma *in situ*.

Starting with the 8th edition in 2017, the clinical T category will now be cTis.

- This rule change for the 8th edition does not affect cases staged with previous editions prior to 2017.
- Starting in 2017 for the 8th edition, other valid T and N categories with the appropriate c and p prefix will be introduced based on 8th edition rules.

Rationale

The decision to change the rules occurred after thoughtful deliberation by many physicians. The main reason for the previous pTis was to emphasize the need for microscopic or histologic evidence of *in situ* carcinoma. The diagnosis of carcinoma *in situ* can never be made on imaging alone.

It was decided to change the clinical T category to cTis, indicating it was a diagnosis made on a diagnostic core needle or incisional biopsy and not based on complete examination of a surgical resection specimen. The pathological T category based on the surgical resection specimen will be pTis. There will now be separate designations, cTis and pTis, indicating the timeframe and type of specimen. During the clinical staging classification, all diagnostic biopsies will be cT regardless of whether the microscopic evidence shows an *in situ* or an invasive cancer, e.g., cTis, cT1a.

8th Edition Chapter 1: Principles of Cancer Staging

Clinical T:

- *In situ* neoplasia identified during the diagnostic workup on a core or incisional biopsy is assigned cTis.

Pathological T:

- *In situ* neoplasia identified from a surgical resection, as specified in the disease site pathological criteria, is assigned pTis.
- *In situ* neoplasia identified microscopically during the diagnostic workup may be used to assign the pathological stage pTis if the patient had a surgical resection and no residual tumor was identified.

Clinical Stage 0:

- *In situ* neoplasia identified microscopically during the diagnostic workup is assigned as cTis cN0 cM0 clinical Stage 0.

Pathological Stage 0:

- *In situ* neoplasia is an exception to the stage grouping guidelines that otherwise require regional lymph node evaluation for pathological classification. By definition, *in situ* neoplasia has not involved any structures in the primary organ that would allow tumor cells to spread to regional nodes or distant sites.
- The primary tumor surgical resection criteria for pathological stage must be met in order to assign pathological Stage 0.
- Lymph node microscopic assessment is not necessary to assign pathological Stage 0 for *in situ* neoplasia; for example, pTis cN0 cM0 is staged as pathological Stage 0.

Summary

The following rules should be applied for carcinoma *in situ* depending on when the case was diagnosed. This is based on a diagnostic biopsy with microscopic evidence of *in situ* for the clinical stage, and the appropriate surgical resection performed for the pathological stage.

- Cases diagnosed 2010 – 2016, Seventh Edition:
  - pTis cN0 cM0 clinical stage 0
  - pTis cN0 cM0 pathological stage 0
- Cases diagnosed 2017 –, Eighth Edition:
  - cTis cN0 cM0 clinical stage 0
  - pTis cN0 cM0 pathological stage 0

General Chapter Outline and Contents

AJCC Cancer Staging Manual, 8th Edition – Chapter Outline	
Chapter Summary	Summary of major changes and applicable disease • Cancers Staged Using This Staging System • Cancers NotS Staged Using This Staging System • Summary of Changes • ICD-O-32 Topography Codes • WHO Histology Codes
Introduction	General information on the disease site, such as background, trends, and recent discoveries
Anatomy	• Primary Site(s) • Regional Lymph Nodes • Metastatic Sites
Rules for Classification	• Clinical ○ Imaging • Pathological
Prognostic Factors	Indication and discussion of non-TNM prognostic factors important in each disease • Prognostic Factors Required for Stage Grouping • Additional Factors Recommended for Clinical Care • Emerging Factors for Clinical Care (Web Only)
Risk Assessment Models	Prognostic and predictive models validated by the AJCC's acceptance criteria for inclusion of risk models for individualized prognosis in the practice of precision medicine • Updates are available at www.cancerstaging.org
Recommendations for Clinical Trial Stratification	Recommended factors for partitioning patients entering a clinical trial (web only)
Definitions of AJCC TNM	• Definition of Primary Tumor (T) • Definition of Regional Lymph Node (N) • Definition of Distant Metastasis (M)
AJCC Prognostic Stage Groupings	Organization of T, N, M, and any additional categories into groups
Registry Data Collection Variables	Prognostic variable recommended for collection in cancer registries
Histologic Grade (G)	Grading system to be used
Histopathologic Type	Discussion or listing of histopathologic types
Survival Data	Survival data are the basis for anatomic stage and prognostic groups
Illustration	Additional figures illustrating anatomic extent of disease

153

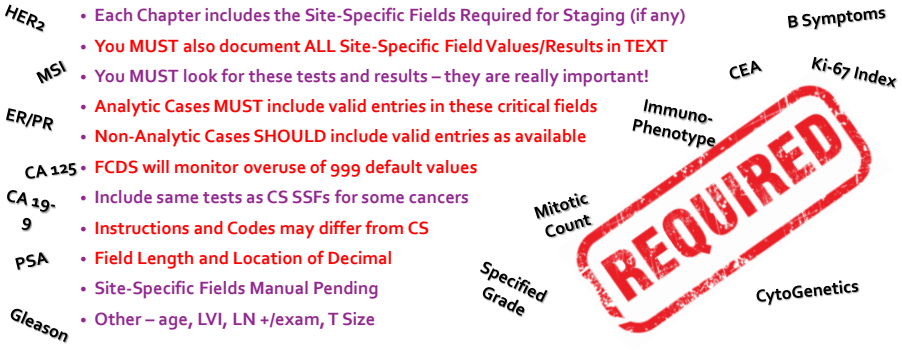
Importance of Cancer Genomics - NCI

- **Cancer is a genetic disease.**
- Cancer genomics research contributes to precision medicine by defining cancer types and subtypes based on their genetics and identify targets for new medicines
- "targeted therapies" specifically combat characteristics of cancer cells that are different from normal cells of the body. This makes them less likely to be toxic for patients compared to other treatments such as chemotherapy and radiation that can kill normal cells.
- How do "targeted therapies" work?
  - Inhibit enzymes that trigger the abnormal growth and survival of cancer cells
    - Imatinib (Gleevec) inhibits overactivity of protein Bcr-ABL tyrosine kinase in leukemia patients
  - Block aberrant gene expression characteristic of cancer cells
    - Trastuzumab (Herceptin) controls hyperactive signaling pathway (HER2 tyrosine kinase) - breast
  - Halt molecular signaling pathways that are in overdrive in cancer cells
    - Erlotinib (Tarceva) and gefitinib (Iressa) both restrict activation opf a protein (EGFR) in lung cancers

154

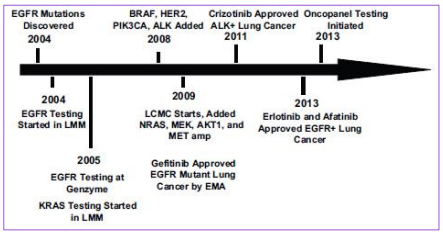
Site-Specific Fields Required for Staging

- Each Chapter includes the Site-Specific Fields Required for Staging (if any)
- You MUST also document ALL Site-Specific Field Values/Results in TEXT
- You MUST look for these tests and results – they are really important!
- Analytic Cases MUST include valid entries in these critical fields
- Non-Analytic Cases SHOULD include valid entries as available
- FCDS will monitor overuse of 999 default values
- Include same tests as CS SSFs for some cancers
- Instructions and Codes may differ from CS
- Field Length and Location of Decimal
- Site-Specific Fields Manual Pending
- Other – age, LVI, LN +/exam, T Size



155

Site-Specific Fields – Emerging Factors



Identification of and Testing for Next Generation Biomarkers, Genetic Tests and Multi-Gene Profiles and Establishing Data Collection Standards for Emerging SSFs

156

Determining Prognostic Stage Groups

- MUST MEET THE CRITERIA FOR STAGING TO BE STAGED
- Verify ALL Required Variables Have Been Coded
- Clinical Prognostic Stage Group
- Pathological Prognostic Stage Group
- Response to Neoadjuvant Therapy (yp/yc)
- Proper Use of Clinical and Pathological Descriptor Fields

Table 8. Examples of Revisions to Breast Cancer Staging Using Biomarkers and Oncotype DX

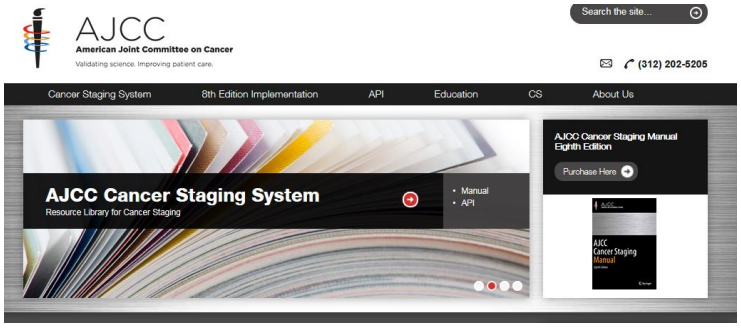
T	N	M	G	HER2	ER	PR	SEVENTH EDITION ANATOMIC STAGE/PROGNOSTIC GROUP	EIGHTH EDITION PROGNOSTIC STAGE GROUP
Biomarkers								
1	0	0	1	–	–	–	IA	IIA
1	0	0	3	–	+	–	IA	IIA
3	1-2	0	1	+	+	+	IIIA	IB
Oncotype DX recurrence score <11 for ER-positive tumors								
2	0	0	Any	–	+	Any	IIA	IB
1-2	1	0	Any	–	+	Any	IIA/IIB	IB
0-2	2	0	1-2	+	+	+	IIIA	IB

Abbreviations: –, negative; 0+, positive; ER, estrogen receptor; G, grade; HER2, human epidermal growth factor receptor 2; M, metastasis classification; N, lymph node classification; PR, progesterone receptor; T, tumor classification.

157

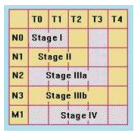
Helpful Information

https://cancerstaging.org



158

NEW SITE-SPECIFIC FIELDS "REQUIRED FOR STAGING" AJCC 8TH ED.



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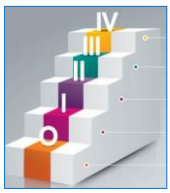

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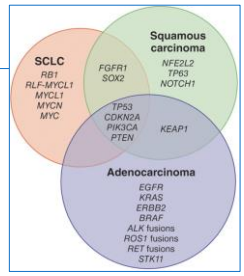
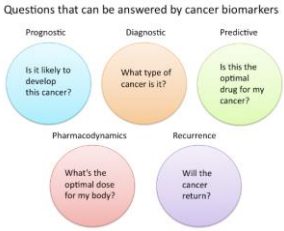
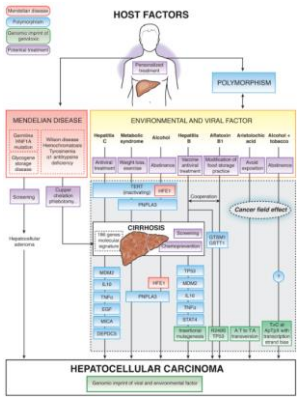


159

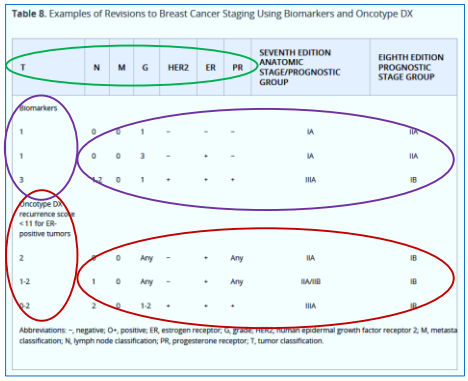
Required/Clinically Relevant/Investigational





160

Using Required SSFs to Assign Stage Group



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1	0	0	3	–	+	–	IA	IIA
3	1-2	0	1	+	+	+	IIIA	IB
Oncotype DX recurrence score <11 for ER-positive tumors								
2	0	0	Any	–	+	Any	IIA	IB
1-2	1	0	Any	–	+	Any	IIA/IIB	IB
1-2	2	0	1-2	+	+	+	IIIA	IB

Abbreviations: –, negative; O+, positive; ER, estrogen receptor; G, grade; HER2, human epidermal growth factor receptor 2; M, metastasis classification; N, lymph node classification; PR, progesterone receptor; T, tumor classification.

161

Locating SSFs in AJCC Staging Manual, 8th ed.

Chapter Specific

Prognostic Factors Section in Chapter

Registry Data Collection Variables Listed in Chapter

AJCC Cancer Staging Manual, 8th Edition – Chapter Outline	
Chapter Summary	Summary of major changes and applicable disease • Cancers Staged Using This Staging System • Cancers Not Staged Using This Staging System • Summary of Changes • ICD-O-32 Topography Codes • WHO Histology Codes
Introduction	General information on the disease site, such as background, trends, and recent discoveries
Anatomy	• Primary Site(s) • Regional Lymph Nodes • Metastatic Sites
Rules for Classification	• Clinical ○ Imaging • Pathological
Prognostic Factors	Indication and discussion of non-TNM prognostic factors important in each disease • Prognostic Factors Required for Stage Grouping • Additional Factors Recommended for Clinical Care • Emerging Factors for Clinical Care (Web Only)
Risk Assessment Models	Prognostic and prediction models validated by the AJCC's acceptance criteria for inclusion of risk models for individualized prognosis in the practice of precision medicine • Updates are available at www.cancerstaging.org
Recommendations for Clinical Trial Stratification	Recommended factors for partitioning patients entering a clinical trial (web only)
Definitions of AJCC TNM	• Definition of Primary Tumor (T) • Definition of Regional Lymph Node (N) • Definition of Distant Metastasis (M)
AJCC Prognostic Stage Groupings	Organization of T, N, M, and any additional categories into groups
Registry Data Collection Variables	Prognostic variable recommended for collection in cancer registries
Histologic Grade (G)	Grading system to be used
Histopathologic Type	Discussion or listing of histopathologic types
Survival Data	Survival data are the basis for anatomic stage and prognostic groups
Illustration	Additional figures illustrating anatomic extent of disease

162

New SSFs - Shared Across Chapters

AJCC Grade Clinical AJCC Grade Pathologic	(16) Esophagus and Esophagogastric Junction (19) Appendix – Carcinoma (38) Bone *(appendicular skeleton, spine, and pelvis)* (40) Soft Tissue Sarcoma of the Head and Neck (41) Soft Tissue Sarcoma of the Trunk and Extremities (42) Soft Tissue Sarcoma of the Abdomen and Thoracic Visceral Organs (44) Soft Tissue Sarcoma of the Retroperitoneum (45) Soft Tissue Sarcoma – Unusual Histologies and Sites (48) Breast
AJCC GIST Mitotic Count Clinical	(43) Gastrointestinal Stromal Tumor
AJCC GIST Mitotic Count Pathologic	
AJCC Oropharyngeal p16	(10) HPV-Mediated (p16+) Oropharyngeal Cancer (11) Oropharynx (p16–) and Hypopharynx
Revised LVI	All

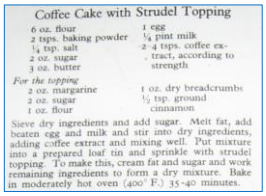
New SSFs - Required to Assign Stage Group

AJCC Grade Clinical AJCC Grade Pathologic	(16) Esophagus and Esophagogastric Junction (19) Appendix – Carcinoma (38) Bone *(appendicular skeleton, spine, and pelvis)* (40) Soft Tissue Sarcoma of the Head and Neck (41) Soft Tissue Sarcoma of the Trunk and Extremities (42) Soft Tissue Sarcoma of the Abdomen and Thoracic Visceral Organs (44) Soft Tissue Sarcoma of the Retroperitoneum (45) Soft Tissue Sarcoma – Unusual Histologies and Sites (48) Breast
AJCC GIST Mitotic Count Clinical AJCC GIST Mitotic Count Pathologic	(43) Gastrointestinal Stromal Tumor
AJCC Oropharyngeal p16	(10) HPV-Mediated (p16+) Oropharyngeal Cancer (11) Oropharynx (p16–) and Hypopharynx
Revised LVI	All

AJCC Testis Serum Markers Clinical AJCC Testis Serum Markers Pathologic	(9) Testis
AJCC Esophagus and EGJ Tumor Epicenter	(16) Esophagus and Esophagogastric Junction
AJCC Retinoblastoma Heritable Trait	(68) Retinoblastoma
Revised SSF25 (Lip/vermillion border)	C00.0-upper lip, C00.1-lower lip, C00.2-lip NOS. Cancers of the external lip are staged using AJCC chapter 7. Cancers of the vermillion border are staged using AJCC chapter 15.
Revised SSF25 (cervical node unknown primary)	Occult Head/Neck 1) patients with EBV-related cervical adenopathy are staged according to Chapter 9 (Nasopharynx); (2) patients with HPV-related cervical adenopathy are staged according to Chapter 10 (HPV-mediated oropharyngeal cancer (p16+)); (3) all other patients with EBV-unrelated and HPV-unrelated cervical adenopathy are staged according to Chapter 6
AJCC CLL/SLL Absolute Lymphocyte Count AJCC CLL/SLL Adenopathy AJCC CLL/SLL Organomegaly AJCC CLL/SLL Anemia AJCC CLL/SLL Thrombocytopenia	(79) Hodgkin and Non-Hodgkin Lymphomas
AJCC MM/Plasma Cell Serum β2-microglobulin AJCC MM/Plasma Cell Serum albumin AJCC MM/Plasma Cell LDH Level AJCC MM/Plasma Cell FISH Results	(82) Multiple Myeloma and Plasma Cell Disorders

What if the Required SSF Info is Missing?

Recipe Includes
Ingredients AND Instructions



Coffee Cake with Strudel Topping

6 oz. flour
2 tsps. baking powder
¼ tsp. salt
2 oz. sugar
3 oz. butter
1 egg
¼ pint milk
2-4 tsps. coffee extract, according to strength

For the topping
2 oz. margarine
2 oz. sugar
1 oz. flour
1 oz. dry breadcrumbs
½ tsp. ground cinnamon

Sieve dry ingredients and add sugar. Melt fat, add beaten egg and milk and stir into dry ingredients, adding coffee extract and mixing well. Put mixture into a prepared loaf tin and sprinkle with strudel topping. To make this, cream fat and sugar and work remaining ingredients to form a dry mixture. Bake in moderately hot oven (400° F.) 35-40 minutes.

Cake will be fine without using baking power – right?

I am in a hurry– Can I bake the cake @ 500° for 15 min?

No Substitutions

165

FCDS Prognostic Factors Webcast – 9/21/17

Date	Time Schedule 3rd Thursday	Presentation Title
8/17/2017	1:00pm – 3:00pm	Convention Brief: 2017 FCDS Annual Meeting Highlights
9/21/2017	1:00pm – 3:00pm	Biomolecular and Genetic Tumor Profiles: Classification and Characteristics of Disease, Required SSFs, CAP Biomarker Checklists, and Targeting Treatment
10/19/2017	1:00pm – 3:00pm	Lymphoid & Myeloid Neoplasms: 2016 Revision of the WHO Classification & You
11/16/2017	1:00pm – 3:00pm	Lung Cancer: FCDS Audit Findings, Anatomy, Staging Using the AJCC 8th ed., SSF Req'd to Stage
December	N/A	No Webcast Scheduled
1/18/2018	1:00pm – 3:00pm	2018 MPH Rules: MPH Rule Updates for Solid Tumors and Introduction to the Solid Tumors Database
2/15/2018	1:00pm – 3:00pm	AJCC Cancer Staging Manual 8th ed. and Summary Stage 2018

166

FCDS EDITS METAFILE
NAVIGATING TNM & STAGING EDITS

FCDS Annual Educational Conference

Orlando, Florida

July 28, 2017

Steven Peace, CTR

167

NPCR Release of EDITS 5.0 Tools

- **EDITS 4.0 – Uses .EMF and .RMF formats**
- **EDITS 5.0 – Uses .SMF (SQLite) format** for all tools including; Edit Engine, EditWriter, GenEDITS Plus
  - The Edit Engine runs edits more than twice as fast as the EDITS4.0 version.
  - The EDITS metafile is a SQLite database.
  - The EDITS5.0 API and documentation are more powerful and easier to use.
- **EDITWriter 5.0 – New Features**
  - Edit logic syntax checker catches more errors and issues warnings
  - Edit set form generates a GenEDITS-style report
  - Table form supports copy/paste data from Excel-type spreadsheet
  - Import metafile module performs analysis of differences in 1-2 seconds (previous version took 20-30 min for analysis)
- **GenEDITS Plus 5.0 – New Features**
  - Multiple-document interface allows opening multiple concurrent configurations.
  - EDITS run-time debugger lets power users drill down into the reasons a case passed or failed an edit unexpectedly.
  - Writes the results of the run into a SQLite database, available for ad hoc querying.
  - GenEDITS.dll and API simplify programming for custom software to process incoming data files at central registries.

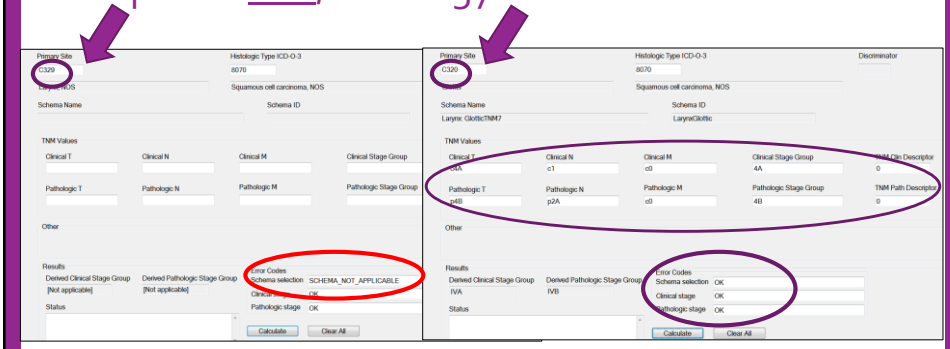
168

How to "Figure Out" What/Where Error Is

```
3HL 201601472 00 C669 81303  (1)
      TNM Path cN0 2016 (CoC)
      E: 1760: TNM Path N may be coded c0 only when TNM Path T = in situ
         TNM Path T(940)                  = p1                  _ _ _ _
         TNM Path N(944)                  = c0                  _ _ _ _
         Date of Diagnosis(530)           = Y:2016 M:08 D:29    _ _ _ _ _ _ _ _
         TNM Edition Number(938)          = 07                  _ _

T1pNX
3HL 201601472 00 C669 81303  (1)
      Primary Site, TNM Path Stage Valid B- Ed 7 (COC)
      E: 1643: Inconsistency between TNM categories, assigned TNM stage 1
         TNM Path T(940)                  = p1                  _ _ _ _
         TNM Path N(944)                  = pX                  _ _ _ _
         TNM Path M(948)                  = c0                  _ _ _ _
         TNM Path Stage Group(952)        = 1                   _ _ _ _
         Primary Site(540)                = C669                _ _ _ _
         Histologic Type ICD-O-3(550)     = 8130                _ _ _ _
         Behavior Code ICD-O-3(554)       = 3                   _
         Date of Diagnosis(530)           = Y:2016 M:08 D:29    _ _ _ _ _ _ _ _
         TNM Edition Number(938)          = 07                  _ _
         TNM Path Descriptor(956)         = 0                   _
         Age at Diagnosis(193)            = 078                 _ _ _
         Grade(555)                       = 1                   _
         CS Site-Specific Factor 1(1003)  = 010                 _ _ _
         CS Site-Specific Factor 8(1024)  = 988                 _ _ _
         CS Site-Specific Factor10(1030)  = 988                 _ _ _
         CS Site-Specific Factor13(1039)  = 988                 _ _ _
         CS Site-Specific Factor15(1045)  = 988                 _ _ _
         CS Site-Specific Factor16(1048)  = 988                 _ _ _
         CS Site-Specific Factor25(1075)  = 988                 _ _ _
         Sex(192)                         = 1                   _
         Type of Reporting Source(563)    = 1                   _
```

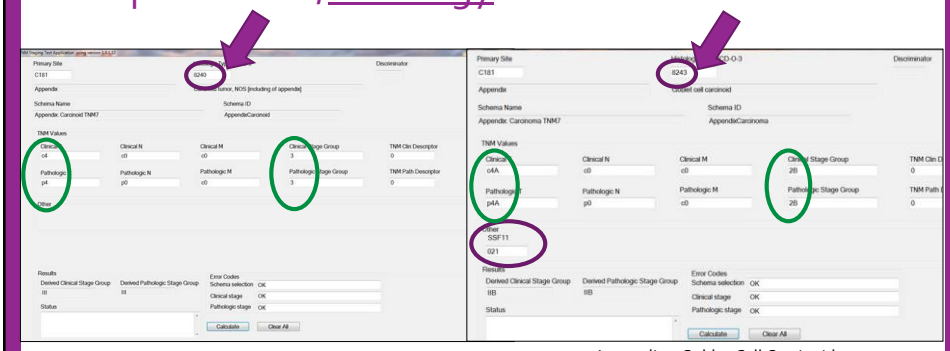

Example 2 – Site/Histology Code Makes a Difference



Larynx, NOS (C32.9) – Any Histology

Glottis (C32.0) – Any Histology

Example 2 – Site/Histology Code Makes a Difference

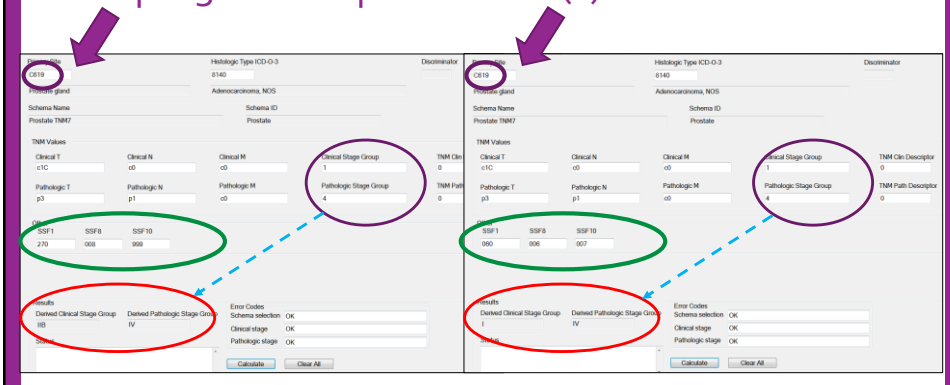


Appendix - Carcinoid, NOS

Appendix – Goblet Cell Carcinoid
Mucinous/Non-Mucinous
Tumor Grade

171

Example 3 – Site-Specific Field(s) Make a Difference



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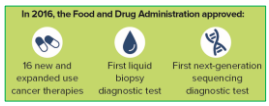

RECENT DEVELOPMENTS IN CANCER DIAGNOSIS AND TREATMENT

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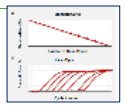

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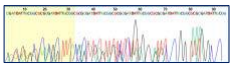
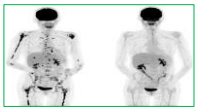
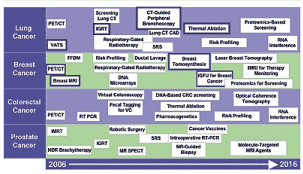




Outline

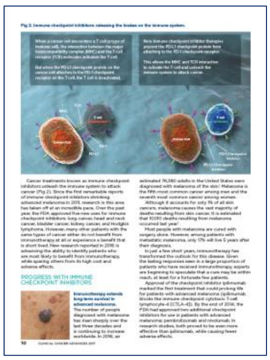
- Revised Common Rule and Cancer Surveillance
- 2017 Incidence & Mortality Estimates
- AACR Cancer Progress Report 2016
- National Toxicology Program - 14th Report on Carcinogens
- ASCO 2017 Clinical Cancer Advances
- NCCN Annual Report 2016 – At Our Core
- Explosion of Data / Fragmented Data Sources
- CAP Solid Tumor Selected Tests by Tumor Type
- New Diagnostic Tools & Techniques
- Next Generation Genomic Sequencing
- Next Generation Immuno & Precision Therapies
- Questions

Emerging Technologies Are More Complex and Tumor-Specific



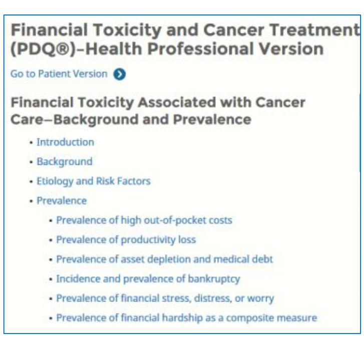
Timings reflect consensus adoption. VATS = video-assisted thoracic surgery; PCR = polymerase chain reaction; VC = virtual colonoscopy. Source: SgE Analysis, 2005.

ASCO 2017 Clinical Cancer Advances



175

Financial Toxicity and Cancer Treatment

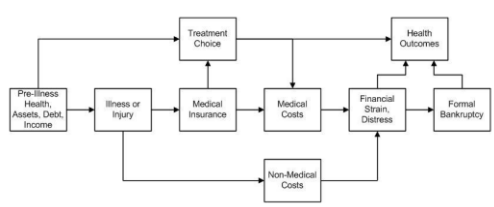


Financial Toxicity and Cancer Treatment (PDQ®)–Health Professional Version

Go to Patient Version

Financial Toxicity Associated with Cancer Care—Background and Prevalence

- Introduction
- Background
- Etiology and Risk Factors
- Prevalence
  - Prevalence of high out-of-pocket costs
  - Prevalence of productivity loss
  - Prevalence of asset depletion and medical debt
  - Incidence and prevalence of bankruptcy
  - Prevalence of financial stress, distress, or worry
  - Prevalence of financial hardship as a composite measure



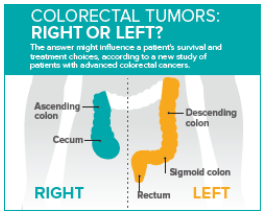
Source: https://www.cancer.gov/about-cancer/managing-care/financial-toxicity-hp-pdq

176

Colon Tumor Location and Treatment

Median Overall Survival by Tumor Location and Therapy

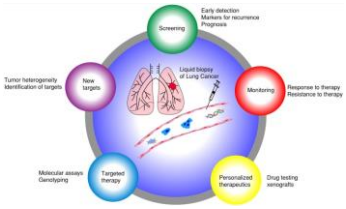
	Left-Sided Tumors	Right-Sided Tumors
All Patients	33.3 months	19.4 months
Patients Treated with Cetuximab	36 months	16.7 months
Patients Treated with Bevacizumab	31.4 months	24.2 months

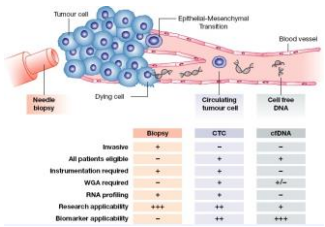


Although patients whose tumors originated in the left colon lived substantially longer after treatment than patients whose tumors originated in the right colon, the survival improvement for patients treated with cetuximab was more pronounced. And patients with right-sided tumors had better outcomes when treated with bevacizumab.

177

Liquid Biopsy





	Biopsy	CTC	cfDNA
Invasive	+	−	−
All patients eligible	−	+	+
Instrumentation required	+	+	−
WGA required	−	+	+/−
RNA profiling	+	+	−
Research applicability	+++	++	+
Biomarker applicability	−	++	+++

- Liquid biopsy is a minimally invasive technology for detection of molecular biomarkers without the need for costly or invasive procedures.
- Circulating cancer cells or traces of the cancer's RNA or DNA in the blood can give clues about which treatments are likely to work for a patient.
- Circulating nucleic acids are protected by extracellular micro-vesicles, mainly exosomes.
- Exosomes are cell-derived vesicles that are present in many and perhaps all eukaryotic fluids, including blood, urine, and cultured medium of cell cultures.
- Exosomes maintain specified "compartments" of micro and macro molecules. Cancers create an expulsion of key proteins and microRNAs resulting in mis-expression of intracellular molecules which in turn interrupt cancer's intra and extra cellular communications pathways

178

Update on NCI MATCH Trial & SubProtocols

(**M**olecular **A**nalysis for **T**herapy **Ch**oice)

Sub Protocol	MATCH	Restrictions	Treatment
EAY131 – **A**	Solid tumors or lymphomas with **activating mutations of EGFR** that progressed after standard TX	Small Cell and Non-Small cell Lung cancer excluded	Afatinib 40 mg QD PO
EAY131 – **B**	**HER2 activating**	Non-Small cell lung cancer excluded. No	Afatinib 40 mg QD PO
EAY131 – **C1**	Tumors with **MET amplification**		Cabozantinib 250 mg BID PO
EAY131 – **C2**	Tumors with **MET Exon 14 deletion**		Cabozantinib 250 mg BID PO
EAY131 – **E**	Tumors with **EGFR T790M mutation** or **rare activating mutations of EGFR**	Non-Small Cell Lung Cancer	AZD9291 80 mg QD PO
EAY131 – **F**	Tumors with **ALK translocations**	Adenocarcinoma of lung or	Cabozantinib 250 mg BID PO
EAY131 – **G**	**ROS1 Translocations or Inversion**	Non-Small Cell Lung Cancer	Cabozantinib 250 mg BID PO
EAY131 – **H**	Tumors with **BRAF V600E, V600K, V600R or V600D** Mutations	Metastatic melanoma from	Trametinib 2 mg QD PO + Dabrafenib 150 mg BID
EAY131 – **I**	**PIK3CA mutation**	Breast cancer, squamous cell	GDC-0032 (Taselisib) 4 mg QD PO
EAY131 – **J**	**HER2 amplifications (> 7 copies/cell)**	Breast, gastric/GEJ/Es	Pertuzumab IV 840 mg + Trastuzumab IV 8 mg/kg

Sub Protocol	MATCH	Restrictions	Treatment
EAY131 – **L**	**mTOR**	Patients with brain mets must not have progression for over 1 month prior to start of tx.	TAK228 (MLN0128) 3 mg QD PO
EAY131 – **M**	**TSC1 or TSC2**	Patients with brain mets must not have progression for over 1 month prior to start of tx.	TAK228 (MLN0128) 3 mg QD PO
EAY131 – **N**	Tumors with **PTEN mutation/deletion**, with PTEN	PTEN mutation ≥25% variant	PI3K Beta Specific inhibitor GSK2636771 400 mg QD
EAY131 – **P**	**PTEN loss** via IHC.	Non-Small Cell Lung Cancer	GSK2636771 400 mg QD PO
EAY131 – **Q**	Tumors with **HER 2 amplification (> 7)**	Breast, Gastric, Gastroesophageal Junction	Ado-trastuzumab Emtansine 3.6mg/kg IV once every 3 weeks
EAY131 – **R**	**BRAF fusions**, or with **non V600E**, or **non V600K** mutations	HX of interstitial lung disease or	Trametinib 2 mg QD PO
EAY131 – **S1**	Tumors with **NF1** mutations	Must have deleterious inactivating NF-	Trametinib 2 mg QD PO
EAY131 – **S2**	Tumors with **GNAQ or GNA11** mutations	No HX of interstitial lung	Trametinib 2 mg QD PO

179

NCRA CEU 2017-088
Total Conference CEU = 9.5 hours
Category A CEU = 3.75 hours

Questions

180