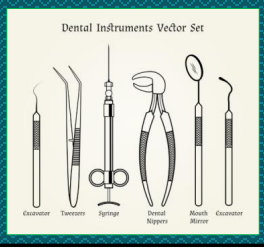
Convention Brief: FCDS Annual Conference

2019-2020 FCDS Educational Webcast Series
August 22, 2019

Steven Peace, CTR



CDC & Florida DOH Attribution

"Funding for this conference was made possible (in part) by the Centers for Disease Control and Prevention. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the US Government."

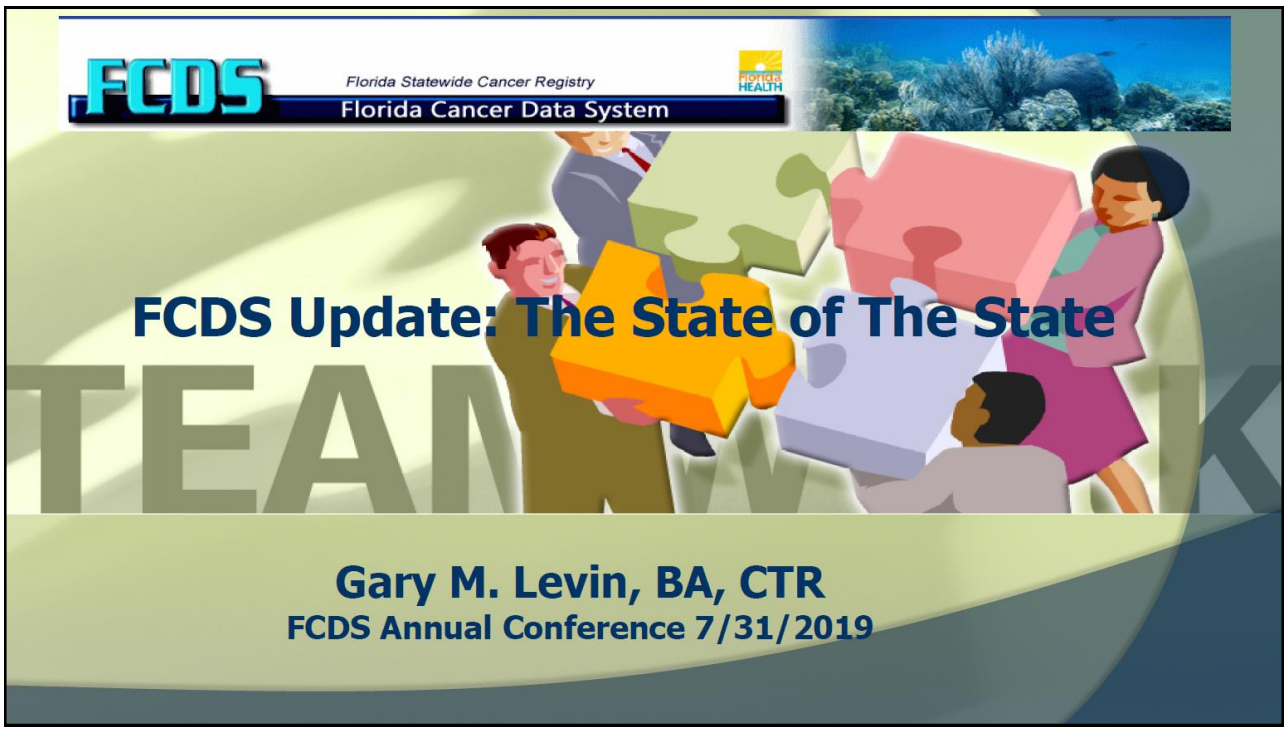
FCDS would also like to acknowledge the Florida Department of Health for its support of the Florida Cancer Data System, including the development, printing and distribution of materials for the 2019 FCDS Annual Conference and the 2019-2020 FCDS Webcast Series under state contract CODJU. The findings 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

2019 FCDS Annual Meeting Department of Health Updates

Florida HEALTH

3



NAACCR Gold Certification Seventeenth Consecutive Year!!


National Program of Cancer Registries

2018 Registry of Distinction

The Key to Cancer Control

Awarded to

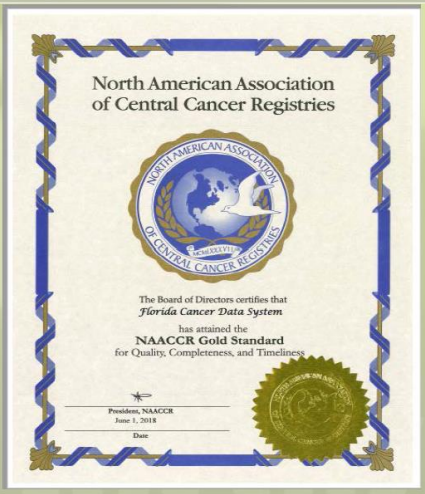
FLORIDA CANCER DATA SYSTEM

In recognition of providing complete and timely National Program of Cancer Registries data in 2018

Vicki Benard May 6, 2019

Vicki Benard, PhD
Chief, Cancer Surveillance Branch
Division of Cancer Prevention and Control

Date


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

President, NAACCR
June 1, 2018

Date


National Program of Cancer Registries

U.S. Cancer Statistics Registry for Surveillance

FLORIDA CANCER DATA SYSTEM

Provides critical and high-quality data that are included in the official federal statistics on cancer incidence and mortality. United States Cancer Statistics (USCS): USCS data are used to assess the cancer burden, inform and evaluate prevention efforts, and address disparities. USCS is produced annually by the U.S. Centers for Disease Control and Prevention (CDC) and the National Cancer Institute (NCI).

Vicki Benard May 6, 2019

Vicki Benard, PhD
Chief, Cancer Surveillance Branch
Division of Cancer Prevention and Control

Your Hard Work and Dedication Makes this Possible - Thank You 3

CCRAB

Florida Cancer Control & Research Advisory Council

Christopher R. Cogle, M.D.
Chairperson
Christopher.Cogle@medicine.ufl.edu

Bobbie McKee, Ph.D.
External Board Manager
Bobbie.Mckee@moffitt.org

DOH Cancer Programs
- State Cancer Registry / FCDS
- Biomedical Research Program Grants
- Comp Cancer Control / CDC
- Breast & Cervical Screening / CDC
- Colorectal Cancer Screening
- Lung Cancer Screening
- Cancer Centers of Excellence
- NCI CCC Designation Stimulus Funding

Florida Cancer Control & Research Advisory Council (CCRAB)
- Write State Cancer Plan
- Advise DOH on Cancer Programs
- Commons area for advocacy

Florida Prostate Cancer Council
- Educates clinicians
- Educates public

Florida Cancer Control & Research Advisory Council Membership

(January 2019)

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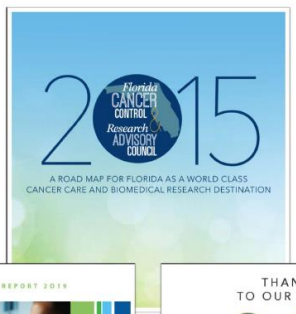
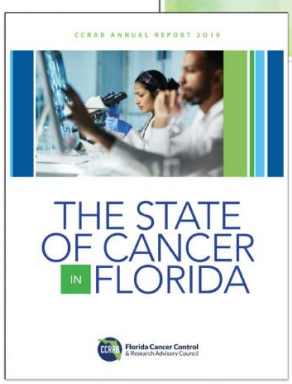




Creating a
healthier world.

Creating a multi-source, longitudinally-linked dataset to examine the association between birth defects and childhood cancer and between maternal cancer and adverse pregnancy outcomes

Russell S. Kirby, PhD, MS, FACE
Distinguished University Professor, Marrell Endowed Chair
Strategic Area Faculty Lead for Population Health Science
College of Public Health
University of South Florida

Research

JAMA Oncology | Original Investigation

Association Between Birth Defects and Cancer Risk Among Children and Adolescents in a Population-Based Assessment of 10 Million Live Births

Philip J. Lupo, PhD; Jeremy M. Schraw, PhD; Tania A. Desrosiers, PhD; Wendy N. Nembhard, PhD; Peter H. Langlois, PhD; Mark A. Canfield, PhD; Glenn Copeland, MBA; Robert E. Meyer, PhD; Austin L. Brown, PhD; Tiffany M. Chambers, MPH; Pagna Sok, MPH; Heather E. Danysh, PhD; Susan E. Carozza, PhD; Saumya D. Sisoudiya, BS; Susan G. Hilsenbeck, PhD; Amanda E. Janitz, PhD; Matthew E. Oster, MD, MPH; Angela E. Scheuerle, MD; Joshua D. Schiffman, MD; Chunqiao Luo, MS; Amir Mian, MD; Beth A. Mueller; Chad D. Huff, PhD; Sonja A. Rasmussen, MD, MS; Michael E. Scheurer, PhD; Sharon E. Plon, MD, PhD

JAMA Oncol. doi:10.1001/jamaoncol.2019.1215
Published online June 20, 2019.

Findings: Children with chromosomal anomalies 11.6 (95% CI 10.4-12.9) times more likely to be diagnosed with cancer, and children with non-chromosomal birth defects 2.5 (2.4-2.6) times more likely to have a cancer diagnosis before age 18 than children with no birth defects. Children with 4 or more birth defects were 5.9 (5.4-6.5) times more likely to have a cancer diagnosis compared to those with no birth defect.

72 specific birth defect-cancer patterns were analyzed, with many showing statistical associations. Cancers most frequently associated with nonchromosomal defects included hepatoblastoma and neuroblastoma.

10

Pediatric Cancers Among Florida Births

Ten most common primary tumor sites among births occurring in Florida from 1998-2012

Primary Cancer Site*	Infants (N=4,651)	%
Blood, bone marrow, and hematopoietic	1,434	30.8
Any nervous system	1,176	25.3
Brain, & cranial nerves, & spinal cord, (excl. ventricle, cerebellum)	818	17.6
Kidney	331	7.1
Connective & soft tissue	291	6.3
Adrenal glands	234	5.0
Any eye	217	4.7
Cerebellum	215	4.6
Lymph nodes	215	4.6
Bones and joints	184	4.0
Retina	187	4.0
Liver	94	2.0

*Infants may have been diagnosed with more than one cancer

University of South Florida College of Public Health
our practice is our passion.

USF HEALTH

11

Firefighter's Cancer Study Linkage Update

David J. Lee

Tulay Koru-Sengul, Monique N. Hernandez, Jill. A. Mackinnon, Laura A. McClure, Alberto J. Caban-Martinez, Erin N. Kobetz

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

FIREFIGHTER CANCER INITIATIVE

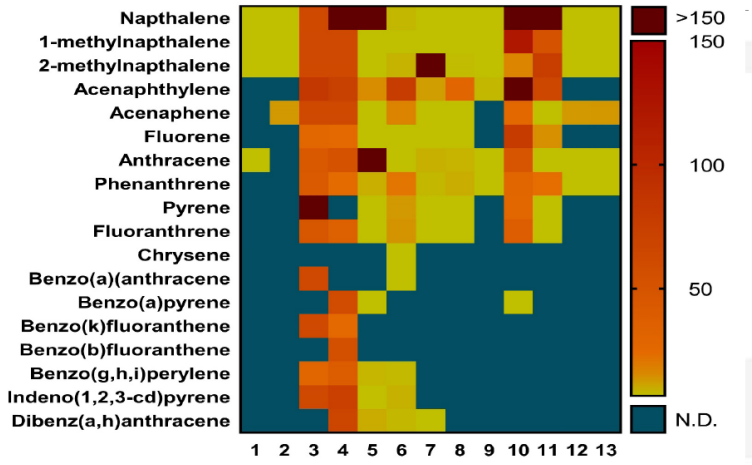
RESEARCH > EDUCATION > PREVENTION

SYLVESTER COMPREHENSIVE CANCER CENTER
UNIVERSITY OF MIAMI HEALTH SYSTEM

State of the Science National Firefighter Cancer Symposium

Firefighters are exposed to numerous carcinogens via dermal, respiratory and ingestion routes

OSHA guidelines Permissible exposure limit (PEL)
PAHs 35.4 ppb
PAHs in water 0.2 ppb (EPA)



The firefighter-associated cancer list expanded in 2019

Cancer Site	LeMasters et al Meta-Analysis 2006	IARC Report 2010	Jalilian et al Meta-Analysis 2019
Prostate	Probable	✓	Incidence
Testicular	Probable	✓	Incidence
Non-Hodgkin's Lymphoma	Probable	✓	Mortality
Multiple Myeloma	Probable		
Rectum	Possible		Incidence + Mortality
Colon	Possible		Incidence
Melanoma	Possible		Incidence
Thyroid			Incidence
Bladder			Incidence
Pleura			Incidence

Int J Cancer. 2019 Feb 8. doi: 10.1002/ijc.32199. [Epub ahead of print]

Everything has been Updated

- SEER*Rx
- FLccSC Updates
- 2019 Case Find List
- FCDS EDITS Metafile
- Grade Coding Manual
- SEER Summary Stage 2018
- SEER 2019 Solid Tumor Rules
- ICD-O-3 Update Clarifications
- Site Specific Data Items Manual
- SEER Registrar Staging Assistant
- SEER Site/Histology Validation Table
- AJCC Site/Histology Schema ID Tables
- SS2018 and 2018 EOD Schema ID Tables
- AJCC Cancer Staging Manual – 3rd printing
- SEER Hematopoietic and Lymphoid Database
- CoC Accreditation – Cancer Program Standards - 2019
- CTR Guide to Coding Radiation Therapy Treatment in STORE

Be Sure to Use the Correct Tool Required for the Job at Hand

15

Required Manuals
The short list with revision dates and Links

	Reference Name	Medium	Effective Date	Latest Update	URL
2	2018 FCDS Complete Casefinding List (ref. 2018 FCDS DAM, Appendix O for all ICD-10 CM Codes)	PDF	1/1/2018	10/1/2018	https://fcds.med.miami.edu/inc/downloads.shtml
3	2018 FCDS Data Acquisition Manual – FCDS DAM 2018	PDF	1/1/2018	8/15/2018	https://fcds.med.miami.edu/inc/downloads.shtml
4	2018 Guidelines for ICD-O-3 Histology Code and Behavior Update	PDF/Excel	1/1/2018	2/8/2019	https://www.naaccr.org/2018-implementation/#Histology
5	2018 New ICD-O-3 Codes	PDF/Excel	1/1/2018	08/22/2018 errata	https://www.naaccr.org/2018-implementation/#Histology
6	2018 SEER Coding and Staging Manual	PDF	1/1/2018	2/1/2018	https://seer.cancer.gov/tools/codingmanuals/index.html
7	2018 SEER Complete ICD-10-CM Codes for Casefinding Lists (short list and detailed list)	PDF/Excel	10/1/2018	10/1/2018	https://seer.cancer.gov/tools/casefinding/
8	2018 SEER Summary Staging Manual - SS2018	PDF	1/1/2018	3/3/2018	https://seer.cancer.gov/tools/ssm/
9	2018 Solid Tumor Rules	PDF	1/1/2018	8/20/2018	https://seer.cancer.gov/tools/solidtumor/
10	2019 CTR Exam Handbook and CTR Exam Resources	PDF	1/1/2019	1/1/2019	http://www.ncra-usa.org/Portals/68/PDFs/Certification%20PDFs/CTR-Exam-Handbook2019.pdf?ver=2018-12-19-110923-987
11	2019 FCDS Complete Casefinding List (ref. 2019 FCDS DAM, Appendix O for all ICD-10-CM Codes)	PDF	pending	pending	https://fcds.med.miami.edu/inc/downloads.shtml
12	2019 FCDS Data Acquisition Manual – FCDS DAM 2019	PDF	1/1/2018	Pending	https://fcds.med.miami.edu/inc/downloads.shtml
13	2019 SEER Complete ICD-10-CM Codes for Casefinding Lists (short list and detailed list)	PDF/Excel	10/1/2019	10/1/2019	https://seer.cancer.gov/tools/casefinding/
14	2019 Solid Tumor Rules	PDF	1/1/2019	Apr-19	https://seer.cancer.gov/tools/solidtumor/
15	AJCC Cancer Staging Manual 8th edition - Chapter 48. Breast (entire chapter replaced)	PDF	1/1/2018	8th edition	https://seer.cancer.gov/tools/ssm/
16	AJCC Cancer Staging Manual, 8th Ed. (3 different printings available)	Printed/e-book	1/1/2018	8th edition	https://www.springer.com/us/book/9783319406176
17	AJCC Histology and Topography Code Supplement, 8th Ed. (AJCC ID Resource)	Excel	2018	8/20/2018	https://cancerstaging.org/references-tools/deskreferences/Pages/8EUpdates.aspx#Histology/Topography
18	AJCC In Situ Neoplasia AJCC 8th Ed.	PDF	1/1/2018	1/1/2018	https://cancerstaging.org/references-tools/deskreferences/Pages/8EUpdates.aspx#Histology/Topography
19	AJCC Node Status Not Required Rare Circumstances AJCC 8th Ed.	PDF	1/1/2018	1/1/2018	https://cancerstaging.org/CSE/Registrar/Documents/Node%20Status%20Not%20Required%20Rare%20Circumstances%20(1).pdf
20	AJCC Staging Rules 8th Ed.	PDF	1/1/2018	1/1/2018	https://cancerstaging.org/CSE/general/Documents/AJCC%20Staging%20Rules%208th%20Ed.pdf
21	Cancer Program Standards: Ensuring Patient-Centered Care	PDF	1/1/2016	1/1/2016	https://www.facs.org/quality-programs/cancer/coc/standards
22	CTR Guide to Coding Radiation Therapy Treatment in the STORE	PDF	1/1/2018	03/15/2019 v1.0	https://www.facs.org/-/media/files/quality-programs/cancer/ncdb/case_studies_coding_radiation_treatment.ashx?la=en
23	FCDS Website	On-line Only	1/1/2005	current	https://fcds.med.miami.edu/inc/welcome.shtml
24	Fundamental Learning Collaborative for the Cancer Surveillance Community - FLccSC	On-line Only	7/1/2017	Content Added	https://fls.fcdslms.med.miami.edu/
25	Grade Coding Manual – Grade Manual	PDF	09/17/2018 V1.2	5/3/2018	https://apps.naaccr.org/ssdi/list/
26	ICD-O-3 Complete Code List	Excel	7/2/2018	1/1/2018	https://www.who.int/classifications/icd/adaptations/oncology/en/
27	ICD-O-3 Errata and Clarifications	PDF	5/22/2001	5/22/2001	https://seer.cancer.gov/icd-o-3/
28	ICD-O-3 Manual, 3rd edition	PDF/printed	1/1/2000	Errata & Updates	https://seer.cancer.gov/icd-o-3/
29	ICD-O-3 Site/Type Tables	Excel	6/18/2019	6/18/2019	https://seer.cancer.gov/icd-o-3/
30	ICD-O-3 Updates for 2010	PDF	1/1/2018	08/22/2018 errata	https://seer.cancer.gov/icd-o-3/
31	ICD-O-3 Updates for 2010	PDF	1/1/2010	1/1/2010	https://seer.cancer.gov/icd-o-3/
32	ICD-O-3 Updates for 2018	PDF/Excel	1/1/2018	08/22/2018 errata	https://seer.cancer.gov/icd-o-3/
33	NAACCR Vol II – Data Standards and Data Dictionary, v18	On-Line Only	1/1/2018	11/7/2018	https://www.naaccr.org/data-standards-data-dictionary/
34	SEER Hematopoietic and Lymphoid Database	On-Line Only	Periodic Update	2/22/2019	http://seer.cancer.gov/seertools/hemelymph/
35	SEER Hematopoietic Coding Manual	PDF	1/1/2018	1/1/2018	http://seer.cancer.gov/seertools/hemelymph/
36	SEER*Rx Interactive Antineoplastic Drugs Database	On-Line Only	Monthly Update	SEER*Rx	https://seer.cancer.gov/tools/seerrx/
37	Site-Specific Data Item Manual & Appendix A&B - SSDI Manual	PDF	1/1/2018	May-18	https://apps.naaccr.org/ssdi/list/
38	Standards for Oncology Registry Entry – STORE	PDF	1/1/2018	08/16/2018 v1.0	https://www.facs.org/quality-programs/cancer/ncdb/registrymanuals/cocmanual
39	SEER*RSA Seer Registrar Staging Assistant	On-line Only	1/1/2018	current	https://seer.cancer.gov/tools/staging/rsa.html

Finding the resource you need
FCDS References and Resources

APPENDIX P – REFERENCES AND RESOURCES FOR REGISTRARS – updated August 15, 2018

2018 References and Resources for Cancer Registrars		
2018 REQUIRED References	**Web Address For Source**	**Notes**
2018 FCDS Data Acquisition Manual (DAM)	http://www.fcds.med.miami.edu/inc/DAM.shtml	Details cancer data reporting guidelines and casefinding mechanisms for identifying reportable cancers.
2018 Casefinding List of ICD-10-CM Required Codes	http://www.fcds.med.miami.edu/inc/DAM.shtml	ICD-10-CM for 2018 Casefinding - General Range and Individual Code Lists are available in the FCDS DAM
2018 MPH Rules - Solid Tumors MPH Rules PLUS Interactive Solid Tumors Database for Coding	https://seer.cancer.gov/tools/solidtumor/	On the home page click on "Information for Cancer Registrars", MP/H Rules
2018 MPH Rules - Heme/Lymph Neoplasm MPH Rules PLUS Interactive Heme/Lymph Database for Coding	http://seer.cancer.gov/seertools/hemelymph/	On the home page click on "Information for Cancer Registrars", Hematopoietic & Lymphoid Neoplasm Project
ICD-O-3 2010 and 2018 Updates and Coding Materials Also See 2018 FCDS DAM for ICD-O-3 Updates	https://seer.cancer.gov/icd-o-3/	On the home page click "Data Collection Tools", Errata and Clarifications".
Site-Specific Data Items Manual (SSDI Manual), SSDI Coding Instructions, and SSDI Coding Application	https://apps.naaccr.org/ssdi/list/	
2018 Grade Manual, Grade Coding Instructions and Tables, and Grade Coding Application	https://apps.naaccr.org/ssdi/list/	
SEER Summary Staging Manual 2018 and any errata Required for ALL 2018> Cases	http://seer.cancer.gov/tools/ssm/	
SEER *Rx – Interactive Drug Database	http://seer.cancer.gov/seertools/seerrx/	A one-step lookup for coding oncology drug and regimen treatment categories in cancer registries
Collaborative Stage Data Collection System – v02.05 Part I Reference for Site-Specific Factor Coding ONLY.	http://www.cancerstaging.org/cstage	Collaborative Stage Data Collection System is no longer supported or in use in the United States beginning 1/1/2016.
Brain & CNS Tumor Reporting	http://www.cdc.gov/cancer/npcr/training	Brain Tumor Registry Reporting Materials
TEXT DOCUMENTATION	http://www.cancerregistryeducation.org/rr	Free Download – NCRA Informational Abstracts – Guidelines for Text Documentation by Cancer Site
Online Help For Abstracting Questions		
Ask a SEER Registrar/SEER Inquiry System	http://www.seer.cancer.gov/registrars/contact.html	Type in a topic, search, and it will show you similar questions that other registrars have submitted along with the answers.
CAnswer Forum (Interactive Q&A Bulletin Board)	http://cancerbulletin.facs.org/forums/	Type in a topic, search, and it will show you similar questions that other registrars have submitted along with the answers.

Finding the resource you need
NCRA JRM - Winter 2018 – Registry Resources

How I Do It

Registry Resources: A Summary Resource Guide for Education, Training, and Online Help for New and Current Cancer Registrars: Part III

Vickie Hawhee, MEd, CTR; Vonetta L. Williams, PhD, MPH, CTR

Introduction

The Registry Resources Guide for Cancer Registrars was first published in this journal in 2015, presented as a list of current resources that registry personnel could use. The list has become longer since then, with many new resources being added in 2018, a year with many changes. Trying to keep up with all the new resources can be daunting for a new certified tumor registrar (CTR) as well as the seasoned professional. This list of resources is not meant to be comprehensive, but rather should serve as a foundation for all things cancer registry.

Methods

The Registry Resources Guide was initially developed to aid new employees when training and with setting up their computer for ease of access to all references. The guide was then expanded to aid employees outside of the cancer registry who work directly with the data, helping those employees understand what we report, how we report it, and why.

Results

The Registry Resources Guide is divided into the following resource categories:

- American College of Surgeons, Commission on Cancer (CoC)
- American Joint Committee on Cancer (AJCC)
- Surveillance, Epidemiology, and End Results (SEER) Program
- World Health Organization (WHO)
- North American Association of Central Cancer Registries (NAACCR)
- Physician and Facility Information
- National Treatment Guidelines
- Chemotherapy/Systemic Drug and Regimen Information
- Follow-up/Outcome
- National Organizations
- Education and Training
- Other Resources

Conclusion

In summary, the Registry Resources Guide should be useful and beneficial to new and current cancer registrars; further development of this guide can incorporate your specific state standards along with any other resources that you use on a regular basis that were not included.

Contact

Vicki Hawhee, MEd, CTR, is the quality control/education specialist for Moffitt Cancer Center in Tampa, Florida. She can be contacted at Vicki.Hawhee@Moffitt.org with any questions.

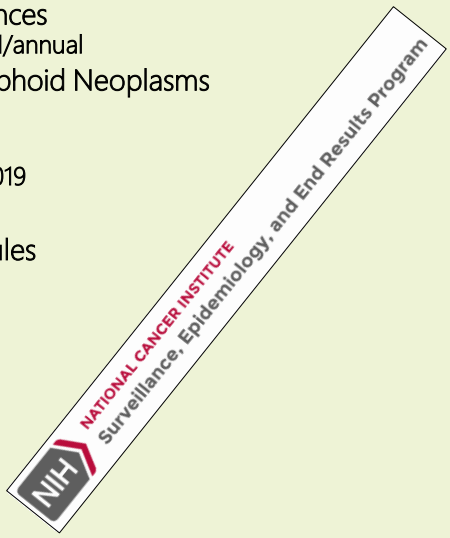
Finding the resource you need
NCRA JRM - Winter 2018 – Registry Resources

Registry Resources Guide for Cancer Registrars

Name of Resource	*Website*	*Description*	*Comments*
American College of Surgeons, Commission on Cancer (CoC)			
STORE: Standards for Oncology Registry Entry (cases diagnosed beginning 01/01/2018)	**https://www.facs.org/quality-programs/cancer/ncdb/registrymanuals/cocmanuals**	Manual used for abstracting cases diagnosed 01/01/2018 and forward, including new radiation data items	Use the correct manual based on the diagnosis year
FORDS—Facility Oncology Registry Data Standards (used for cases diagnosed from 01/01/2003–12/31/2017)	**https://www.facs.org/quality-programs/cancer/ncdb/registrymanuals/cocmanuals/fordsmanual**	Manual used for abstracting cases diagnosed 2003–2017	Use the correct manual based on the diagnosis year
ROADS (Registry Operations and Data Standards)—Used for cases diagnosed from 01/01/1996–12/31/2002	**https://www.facs.org/quality-programs/cancer/ncdb/registrymanuals/cocmanuals**	Manual used for abstracting cases diagnosed 1996–2002	Use the correct manual based on the diagnosis year
Cancer Program Standards	**https://www.facs.org/quality%20programs/cancer/coc/standards**	Downloadable copy of the standards required for CoC facilities.	Make sure you are using the correct (most updated) version
CAnswer Forum	**http://cancerbulletin.facs.org/forums/**	Virtual bulletin board for CoC questions including AJCC, TNM staging, STORE, NCDB, CoC standards, etc	Need to sign up and be assigned a login. Can search for information on AJCC, TNM, STORE, COC standards, and NCDB
CoC Data Links	**https://www.facs.org/quality%20programs/cancer/ncdb**	National Cancer Database	Used for RQRS, CP3R, NCDB submissions and SAR
American Joint Committee on Cancer (AJCC)			
AJCC Registrar Education	**https://cancerstaging.org/CSE/Registrar/Pages/default.aspx**	Self-guided education	Instructions on staging and using the AJCC manual
AJCC 8th edition webinars	**https://cancerstaging.org/CSE/Registrar/Pages/Eight-Edition-Webinars.aspx**	Various webinars that include staging rules for the 8th edition	Free webinars
AJCC Curriculum for Registrars (7th Edition)	**https://cancerstaging.org/CSE/Registrar/Pages/AJCC-Curriculum.aspx**	Self-guided education based on 7th edition; great introduction into staging concepts	Free webinars; provide a great foundation for staging
AJCC Disease Site Webinars (7th edition)	**https://cancerstaging.org/CSE/Registrar/Pages/Disease-Site-Webinars.aspx**	Site-specific webinars for melanoma, lung, breast, prostate, and colorectal cases	Free webinars; based on the 7th edition but give a great foundation
AJCC Past Editions	**https://cancerstaging.org/references-tools/deskreferences/Pages/default.aspx**	Past editions of the AJCC staging manual available online	Make sure to use the correct version based on the date of diagnosis
AJCC channel on YouTube	**https://www.youtube.com/user/AJCCancer**	Various videos 3–9 minutes long giving instruction in staging.	
AJCC 8th Edition	**https://www.springer.com/us/book/9783319406176**	ISBN 978-3-319-40617-6	May be able to find the text offered for sale by different retailers
AJCC 8th edition Staging form Supplement	**https://cancerstaging.org/references-tools/deskreferences/Pages/Cancer-Staging-Forms.aspx**	104 printable staging forms for each staging system	May be downloaded for free

https://seer.cancer.gov/

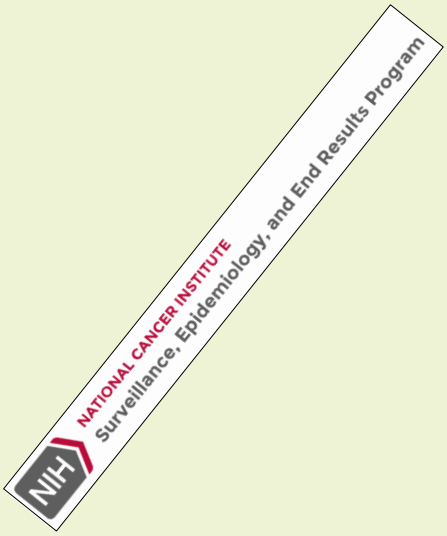
- 2018 and 2019 and 2020 Casefinding Lists – differences
  - Updated Every Year with New ICD-10-CM Codes – 10/1/annual
- Hematopoietic Database & Manual – Myeloid/Lymphoid Neoplasms
- ICD-O-3 Coding Materials
  - NEW 2018> Histology Codes – 1/1/2018
  - ICD-O-3 SEER Site/Histology Validation Table – 6/18/2019
- 2018 Solid Tumor Rules – MP/H Rules
- 2019 Revision to 2018 Solid Tumor Rules – MP/H Rules
- SEER*Rx Database – Updated Monthly
- Glossary for Registrars
- SEER Registrar Staging Assistant (SEER*RSA)
- SEER Summary Stage 2018 Manual
- SEER Basic Abstractor Training Website
- SEER*Educate - SEER Education Portal
- SEER Inquiry System (SINQ)



https://seer.cancer.gov/

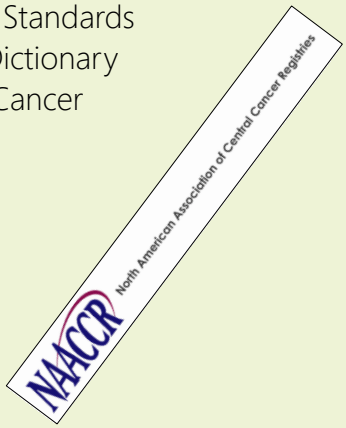
Solid Tumor Rules - Revision History

1. 6/25/2018
2. 6/28/2018
3. 7/3/2018
4. 7/19/2018
5. 7/31/2018
6. 8/2/2018
7. 8/8/2018
8. 8/13/2018
9. 8/16/2018
10. 8/20/2018
11. 8/23/2018
12. 9/11/2018
13. 10/12/2018
14. January 2019
15. July 2019



https://www.naaccr.org/

- Primarily Used by Central Registries like FCDS
  - Central Registry Data Collection & Operations Standards
  - NAACCR Volume II – Data Standards & Data Dictionary
  - Annual Report to the Nation on the Status of Cancer
  - Research Tools
- Facility Registrar References & Resources
  - NAACCR Education & Training Calendar
  - 2018 SSDI Manual
  - 2018 Grade Manual
  - Cancer Schema Search



https://www.facs.org/quality-programs/cancer

- STORE Manual – Standards for Oncology Registry Entry
- CTR Guide to Coding Radiation Therapy Treatment in STORE
- 2016 Cancer Program Standards for Accreditation
- SAR – Survey Application Record / Documentation
- RQRS Reporting – Rapid Quality Reporting System
- NCDB Reporting – National Cancer Data Base
- Information on NAPBC and NAPRC
- Find a CoC-Accredited Program
- CAnswer and Limited Registrar Education & Training Resources

https://fcds.med.miami.edu/inc/welcome.shtml

- 2018 FCDS Data Acquisition Manual – includes all Florida State Cancer Reporting Laws and Requirements PLUS abstracting & coding instructions for Florida Cases.
- FCDS EDITS Metafile – always check the metafile date
- FCDS Profile Modification Form – also in FCDS DAM
- FCDS IDEA – Internet Data Entry/Abstract Submission Portal
- FCDS Annual Reports and FCDS Monograph Reports
- FCDS Data Request and DREAMS Portal
- Florida Zip Code to County to Florida City Tables
- FCDS Memo and Other Publications
- FCDS Staff Contacts (email and phone numbers)
- Links to Other State Registries, Federal Programs and More

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

- FCDS Abstractor Code Test – 2018 Standards
- FCDS Abstracting Basics Course – ABC Course – being updated to the 2018 Standards now they are 'stable'
- FCDS Annual Webcast Series and CEU Quiz
- NAACCR Webinars and CEU Test – Coming Soon
- FCDS Staff Training Course – Coming Soon
- Miscellaneous Courses as Available
- Other State FLccSC Portals will help grow our content base as they begin to share materials with FCDS and other states. This will grow the content very quickly, soon.

https://cancerstaging.org

- AJCC Cancer Staging System – All Editions
- AJCC Cancer Staging Manual, 8th ed. Ordering
- Replacement Chapters and Pages for AJCC 8th ed.
- Histology & Topography - AJCC 8th ed. 108 Stage Schemas
- Cancer Staging Forms and Other Supplements for 8th ed.
- 2018 Training on AJCC Cancer Staging Manual, 8th ed.
- 2016 Training on AJCC Cancer Staging Manual, 7th ed.
- Collaborative Stage Data Collection System

https://www.cap.org/protocols-and-guidelines

- Cancer Reporting Tools
- Cancer Reporting Protocols by Cancer Site and/or Type
- Biomarker Reporting Protocols by Cancer Site and/or Type
- Synoptic Reporting
- CAP electronic Cancer Checklists (CAP eCC)
- CAP electronic Forms and Reporting Module (CAP eFRM)

COLLEGE of AMERICAN PATHOLOGISTS

http://www.cancer.gov and http://nccn.org and http://www.cancer.org

- These are each excellent cancer information resources.
- National Cancer Institute @ National Institutes of Health
  - The Premier Resource for Adult/Pediatric Cancer Information including PDQ
  - Cancer Types A-Z // Research Clinical Trials Information // NCI Drug Dictionary
- National Comprehensive Cancer Network (NCCN)
  - NCCN Guidelines for Detection, Prevention & Risk Reduction
  - NCCN Guidelines for Treatment of Cancer by Site
  - NCCN Guidelines for Patients
  - NCCN Biomarkers Compendium
  - NCCN Imaging Compendium
- American Cancer Society
  - REVISED BOOK – ACS Principles of Oncology – highly recommended
  - Cancer Basics and Cancer A-Z
  - Annual Cancer Facts and Figures and Specialty Facts and Figures

American Cancer Society

NCCN National Comprehensive Cancer Network

NIH NATIONAL CANCER INSTITUTE

http://www.ncra-usa.org

- Professional Organization Site
- Becoming a Cancer Registrar – Becoming a CTR
- NCRA Annual Conference Information & Registration
- Education - http://www.cancerregistryeducation.org/
  - CTR Prep Course and CTR Prep Publications and CTR Exam Resources
  - NCRA Mentoring Program & NCRA Independent Clinical Advisor Program
  - Continuing Education Opportunities
    - NCRA Webcasts
    - NCRA Learning Modules
  - Registry Resources including Informational Abstracts for Text Required
  - CEU Approved Programs and CEU Submissions Portal
- Registry Resources – National Version of FCDS Registry Resources

FCDS Annual Meeting

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2019-2020 FCDS Webcast Schedule

Date	Time Schedule 3rd Thursday	Presentation Title – Speakers including Steven Peace, BS, CTR – FCDS Quality
8/22/2019	1:00pm – 3:00pm	**Convention Brief: 2019 FCDS Annual Meeting Highlights**
9/19/2019	1:00pm – 3:00pm	**ICD-O-3 Coding Intensive:** Use ALL Available ICD-O-3 Tools, Rules, Tables and Instructions to Correctly Determine Reportability of Neoplasm to State or to CoC/NCDB (differences), and to Correctly Code Primary Site, Histologic Type, Behavior, Clinical Grade, Pathological Grade, Post-Therapy Grade, and Classification of Tumor Genetic Markers
10/24/2019 (4th Thurs)	1:00pm – 3:00pm	**Solid Tumor Rule Tips: Confusing Areas and Updates PLUS How to Use the Tables:** This webinar will include multiple practice case exercises aimed at intermediate level of use
11/21/2019	1:00pm – 3:00pm	**Imaging Updates:** When to Use an Imaging Date as Date of Diagnosis, Use of Ambiguous Terminology to Establish a Diagnosis, ***New Rule for Florida*** - No More Unknown Dates of Diagnosis for Any Cases, How to Best Estimate a Diagnosis Date with Limited Data or Notes
12/19/2019	1:00pm – 3:00pm	**FCDS Physician Claims Reporting:** Data Sources, Maintain the DX/Procedure Codes for Cancer, Crosswalk Updates, System Functions, and TX Follow-Up Reports for You to Use
1/16/2020	1:00pm – 3:00pm	**FLccSC Updates and Accessing Shared Resources for Registrar Training and CEUs**
2/20/2020	1:00pm – 3:00pm	**Genetics and Cancer:** Useful Information on Molecular and Genetic Testing for the Classification and Treatment of Neoplasms – Understanding Reports to Confirm a Diagnosis

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2019-2020 NAACCR Webinar Schedule

Date	Time	Presentation Title – Speakers including Jim Hofferkamp, CTR – NAACCR
10/3/2019	9:00am - 12:00pm	Breast 2019 – Wilson Apollo, CTR, Radiation Therapist
11/7/2019	9:00am - 12:00pm	Bladder and Kidney 2019 – Iris Chilton, CTR, Alberta Cancer Registry
12/5/2019	9:00am - 12:00pm	Base of Tongue 2019 – Wilson Apollo, CTR Radiation Therapist
1/9/2020	9:00am - 12:00pm	Prostate 2020 – Bobbi Matt, BS, CTR, State Health Registry of Iowa
2/6/2020	9:00am - 12:00pm	SSDI's an In-Depth Look – Jennifer Ruhl, Chair SSDI Work Group/NCI-SEER
3/5/2020	9:00am - 12:00pm	Abstracting and Coding Boot Camp 2020 – Jim Hofferkamp, CTR
4/2/2020	9:00am - 12:00pm	Melanoma 2020 – Denise Harrison, RHIT, CTR and Louanne Currence, BS, CTR
5/7/2020	9:00am - 12:00pm	Central Nervous System 2020 – Denise Harrison, RHIT, CTR and Louanne Currence, BS, CTR
6/11/2020	9:00am - 12:00pm	Esophagus 2020 – Tonya Bradenburg, CTR, Kentucky Cancer Registry & Jim H.
7/9/2020	9:00am - 12:00pm	Navigating the 2020 Survey Application Record (SAR) Cynthia Boudereaux, LPN
8/6/2020	9:00am - 12:00pm	Corpus Uteri 2020 - Denise Harrison, RHIT, CTR & Louanne Currence, BS, CTR
9/3/2020	9:00am - 12:00pm	Coding Pitfalls 2020 – Janet Vogel, CTR, Himagine Solutions and Jim Hofferkamp, CTR NAACCR

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NAACCR CTR Exam Prep & Review Webinar Series

- 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 $195 – includes "live" sessions
- FCDS picks up the $195 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

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NAACCR CTR Exam Prep & Review Webinar Series

*Dates Provided are "Live" Webinar Dates – Recordings will be available the following day.

Webinar Date*	Time	Topic
*08/27/2019	1:30pm - 3:30pm	Session 1: Introduction to the Exam Format; Registry Operations and Management; Central Registry Activities
*08/29/2019	1:30pm - 3:30pm	Session 2: Data Collection: Casefinding, Abstracting, Coding;
09/03/2019	1:30pm - 3:30pm	Session 3: Data Collection: ICD-O-3 Coding; 2018 Solid Tumor Rules Hematopoietic and Lymphoid Neoplasm Coding
09/10/2019	1:30pm - 3:30pm	Session 4: Data Collection: 2018 STORE Manual Anatomy & Physiology
09/17/2019	1:30pm - 3:30pm	Session 5: Data Quality Assurance; Cancer Program Standards: Ensuring Patient-Centered Care
09/24/2019	1:30pm - 3:30pm	Session 6: Analysis and Data Usage Follow Up, Survivorship & Outcomes
10/01/2019	1:30pm - 3:30pm	Session 7: Data Collection: Staging AJCC 8th Edition (3rd Printing) & Summary Stage 2018
10/08/2019	1:30pm - 3:30pm	Session 8: Timed Test; Overview; Test Taking Tips; Q&A

03/01/2019-03/23/2019 is the CTR Exam Testing Window

*We meet twice the first week

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Other Registry Training and Cancer Information Resources

- NCRA Recognized/Accredited Cancer Certificate and/or Degree Programs
- 2018 SEER Site-Specific Modules and Self-Instructional Training - https://seer.cancer.gov/training/
- 2018 SEER Tools – SEER*Rx, SEER*Heme Rules and Database, SEER*RSA, SEER Solid Tumor Rules, Casefinding Lists
- SEER*Educate - https://educate.fredhutch.org/LandingPage.aspx
- NEW - NAACCR Survey Course: Understanding Population-Basied Cancer Registries Course – free
- 2019-2020 NAACCR Webinar Series - https://fcds.med.miami.edu/scripts/naaccr_webinar.pl
- 2019-2020 NAACCR CTR Exam Prep and Review Webinar Series
- 2019 FCDS Data Acquisition Manual - https://fcds.med.miami.edu/inc/downloads.shtml
- 2019-2020 FCDS Webcast Series - https://fcds.med.miami.edu/inc/educationtraining.shtml
- CoC has LIMITED Training for Registrars
- AJCC has basic AJCC TNM Training – https://cancerstaging.org/
- American Cancer Society has cancer-specific educational materials in their Cancer A-Z Series - https://www.cancer.org/cancer.html
- National Cancer Institute has a TON of information – About Cancer Series – Specific Cancer Types to reinforce topics and concepts, and PDR Summaries
- NCCN Guidelines and CAP Guidelines – for diagnosis, workup, testing, treatment, and follow-up
- NCRA offers basic courses, webinars, and CTR Exam Prep – http://www.ncra-usa.org
- NCRA also hosts ways to become a cancer registrar and becoming a CTR – http://www.cancerregistryeducation.org/become-a-cancer-registrar/
- Registry Software Vendors also provide training on their products and sometimes on cancer registration
- FLccSC will soon have shared partner presentations and handout materials for all of us to use
- Finding a local or remote Professional Registry Mentor thru NCRA or FCRA

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IMPORTANT FCDS POLICY CHANGE

- The Date of Diagnosis Changes will take place immediately - they are creating errors.
- FCDS has long recognized that medical record history and physical exams often include mention of a 'history of cancer' but provide little if any information regarding when or where the initial diagnosis or cancer or initial treatment occurred. This is why for many years FCDS has allowed registrars to enter blanks, 9's, or use the Date of Admission as a proxy for the Date of Initial Diagnosis when no information was available in the medical record. This generally applied to non-analytic cases seen at your facility with current evidence of cancer and historical-only cases with no evidence of cancer reported to FCDS in the historical grid when a new cancer has been diagnosed (multiple primaries diagnosed over patient's lifetime).
- Without a valid year of diagnosis, the EDITS cannot determine which set of diagnosis year specific standards to apply which has led to complicated Florida-only rules for EDITS to point to which standards the EDITS must apply when trying to stage and grade cases (and the site-specific data items) and based on the Date of First Contact. Date of First Contact has proven not to be a very good proxy for Date of Diagnosis.

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IMPORTANT FCDS POLICY CHANGE

- FCDS Will No Longer Accept an Unknown or Blank Date of Diagnosis
  - DO NOT USE ADMISSION DATE AS A PROXY DATE OF DIAGNOSIS
  - You MUST Estimate Date of Initial Diagnosis for ALL Cases
    - ALL Analytic – no excuse not to estimate a recent dx for cancer you are treating
    - Non-analytic with Evidence of Recurrence/Progression
    - Historical case - No Evidence of one Cancer BUT evidence of another cancer
  - Guidelines will be available in the July 2019 FCDS Memo
  - Guidelines will be available in the 2019 FCDS DAM
  - You MUST Estimate Treatment Dates when you feel they are part of 1st Course TX
- Registrars MUST use every resource available at the reporting facility to determine the best date of diagnosis. In the absence of an exact date of initial diagnosis, you MUST estimate at least the year of diagnosis using your best approximation from the information available in the record.

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IMPORTANT FCDS POLICY CHANGE

- Often, the History and Physical or a Consultation Report will provide clues to aid in estimating a date of diagnosis. Key words and phrases such as recently, a few months ago, or in the distant past can provide hints to when a patient was diagnosed without providing an exact year or date. However, registrars can use these key words and phrases to guide them when determining a reasonable estimated date of diagnosis. Admission Date is a terrible proxy date for First Dx.
- Some histories provide no clues at all as to when the patient was diagnosed with cancer. These can be the most difficult cases to estimate a date of diagnosis.
- Guidelines for estimating dates are provided below bearing in mind that the clues in the record should be used first and will always override the guidelines.
- These are guidelines. No specific rules exist or are available from any program.

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IMPORTANT FCDS POLICY CHANGE

22. FINAL RESORT FOR ESTIMATING DATE OF DIAGNOSIS WHEN NO INFORMATION OR HINTS FOUND:

a. Always take into account the chronology of previous diagnosis of cancer and adjust the below recommendations to take the age of the patient and the chronology of diagnoses into account.

b. FCDS Cancer Site-Specific Estimates when no information available except 'history of *xyz* cancer'. The below estimates are suggestions for a date of diagnosis of last resort and must take the chronology of the other cancers, initial course of therapy, and other factors into account.

c. FCDS Cancer Site-Specific Estimates are loosely based on the Multiple Primary Rules, estimated time to recurrence or progression, expected lifespan, and/or FCDS Experience applying the Multiple Primary Rules over many years and as available. These estimates are far from perfect and must always be used with caution taking into account all other factors available in the H&P.

i. Head and Neck Sites – at least 3 years prior to admission
ii. Colon/Rectosigmoid/Rectum Sites – at least 5 years prior to admission
iii. Lung – at least 3 years prior to admission
iv. Kidney – at least 5 years prior to admission
v. Cutaneous Melanoma – at least 1 year prior to admission
vi. Breast – at least 5 years prior to admission
vii. GYN Sites – at least 5 years prior to admission
viii. Urinary Sites – at least 3 years prior to admission
ix. Prostate – at least 5 years prior to admission
x. Malignant Lymphoma – at least 3 years prior to admission
xi. Chronic Leukemia – at least 5 years prior to admission
xii. Myeloproliferative/Myelodysplastic Neoplasms – at least 5 years prior to admission AND before 2001 when these cancers became reportable to FCDS
xiii. Benign Brain Tumors – at least 5 years prior to admission AND before 2004 when these cancers became reportable to FCDS.
xiv. Malignant Brain Tumors – at least 1 year prior to admission
xv. Other Sites – at least 5 years prior to admission

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2019 CLARIFICATION BIRADS4/BIRADS5

- Breast Imaging includes 2D/3D Mammography, MRI or other imaging technique with a diagnosis of BIRADS Category 4 (suspicious for cancer) or BIRADS Category 5 (positive for cancer).
- These are a "conditional exception" to Instruction 4 which states that you use the imaging date as date of first diagnosis as indicated.
  - A positive/suspicious mammogram alone should never be used to code the date of diagnosis.
  - A positive/suspicious mammogram date should be used as the date of diagnosis ONLY when the patient goes on to subsequently have a positive biopsy and/or resection that confirms the suspicious abnormality is in fact a malignancy.

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2019 FCDS Casefind List – New Codes

NOTE: Most reportable skin cancers have their own specific series of ICD-10-CM codes outside the C44.* (skin cancer) rubric unless otherwise specified. For example; Malignant Melanoma of the skin falls under the rubric of C43.* and D03.* not C44.*. Merkel Cell Carcinoma of the skin falls under the rubric of C4A.* not C44.*. Kaposi sarcoma falls under the rubric of C46.* not C44.*. and Lymphoma of the skin falls under the rubrics of C84.* and C84.A* for cutaneous lymphoma and mycosis fungoides. Basal and Squamous cell carcinoma of the skin is coded under C44.* and are not reportable to FCDS.

For a complete list of ICD-10-CM Required by FCDS Codes for Casefinding please reference Section I of the FCDS DAM (short list) and Appendix O (detailed list). FCDS will be publishing a 2019 Update to the FCDS DAM that will include all required ICD-10-CM Codes for Casefinding. In the meantime, please add the below codes to your casefinding list for 2019 reporting. Thank you. Steve

General Category	Type	ICD-10-CM Code Specific	ICD-10-CM Code Definition
Malignant neoplasm	Reportable	C43.111	Malignant melanoma of right upper eyelid, including canthus
Malignant neoplasm	Reportable	C43.112	Malignant melanoma of right lower eyelid, including canthus
Malignant neoplasm	Reportable	C43.121	Malignant melanoma of left upper eyelid, including canthus
Malignant neoplasm	Reportable	C43.122	Malignant melanoma of left lower eyelid, including canthus
Sebaceous cell carcinoma of skin	Reportable	C44.13	Sebaceous cell carcinoma of skin of eyelid, including canthus
Sebaceous cell carcinoma of skin	Reportable	C44.131	Sebaceous cell carcinoma of skin of unspecified eyelid, including canthus
Sebaceous cell carcinoma of skin	Reportable	C44.132	Sebaceous cell carcinoma of skin of right eyelid, including canthus
Sebaceous cell carcinoma of skin	Reportable	C44.1321	Sebaceous cell carcinoma of skin of right upper eyelid, including canthus
Sebaceous cell carcinoma of skin	Reportable	C44.1322	Sebaceous cell carcinoma of skin of right lower eyelid, including canthus
Sebaceous cell carcinoma of skin	Reportable	C44.139	Sebaceous cell carcinoma of skin of left eyelid, including canthus
Sebaceous cell carcinoma of skin	Reportable	C44.1391	Sebaceous cell carcinoma of skin of left upper eyelid, including canthus
Sebaceous cell carcinoma of skin	Reportable	C44.1392	Sebaceous cell carcinoma of skin of left lower eyelid, including canthus
Malignant neoplasm	Reportable	C4A.111	Merkel cell carcinoma of right upper eyelid, including canthus
Malignant neoplasm	Reportable	C4A.112	Merkel cell carcinoma of right lower eyelid, including canthus
Malignant neoplasm	Reportable	C4A.121	Merkel cell carcinoma of left upper eyelid, including canthus
Malignant neoplasm	Reportable	C4A.122	Merkel cell carcinoma of left lower eyelid, including canthus
In-situ neoplasm	Reportable	D03.111	Melanoma in situ of right upper eyelid, including canthus
In-situ neoplasm	Reportable	D03.112	Melanoma in situ of right lower eyelid, including canthus
In-situ neoplasm	Reportable	D03.121	Melanoma in situ of left upper eyelid, including canthus
In-situ neoplasm	Reportable	D03.122	Melanoma in situ of left lower eyelid, including canthus

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Social Security Number
Now Up to 12% (22,000) of ALL Abstracts

- On April 1, 2019 the Centers for Medicare and Medicaid Services (CMS) stopped using SSN for healthcare billing to the government.
- CMS has replaced the SSN with a new Medicare Billing ID or MBI.
- FCDS and the Florida Statutes for Cancer Reporting STILL REQUIRE all healthcare facilities reporting cancer to FCDS to report valid SSN.
- DO NOT SEND FCDS Computer-Generated SSN – they mess up matching algorithms and we get lots of manual reviews and mismatched records when the SSN is not even an SSN – matched or not.
- DOH has a new 2019 letter to make REGISTRAR ACCESS to SSN clear to administrators and IT professionals – SHOW IT TO THEM…BE BRAVE & DO IT.
- THIS INCLUDES ALL CONTRACTORS WORKING IN ANY FLORIDA FACILITY!!!
- FCDS will continue to monitor the use of 999-99-9999 and Computer-Generated SSN where possible to keep track of increases in use until we have a better methodology to match patients and cancers not using SSN.

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2019 DOH Letter - SSN Data Collection

Mission: To protect, promote & improve the health of all people in Florida through integrated state, county, & community efforts.

Ron DeSantis, Governor

Scott A. Rivkees, MD, State Surgeon General

Vision: To be the Healthiest State in the Nation

To: Florida Reporting Facilities and Abstractors

RE: Patient Social Security Number (SSN) – A Florida Mandated Data Item

The Florida Department of Health would like to remind all reporting entities that a complete and accurately transcribed social security number (SSN) is a required data item that MUST be reported to the state cancer registry, the Florida Cancer Data System (FCDS). Per Rule 64D-3, *Florida Administrative Code (F.A.C.)*, diseases or conditions of public health significance identified by the Florida Department of Health must be reported by the practitioner, hospital, laboratory, or other entity or individual, and this report must include at a minimum the patient's first and last name, including middle initial; address, including city, state, and zip code; telephone number, including area code; date of birth; sex; race; ethnicity; **social security number**; diagnosis, type of diagnostic tests; and treatment given. Cancer is a reportable disease in the state of Florida and all reportable cancers submitted to the FCDS must have an accurate, complete social security number (SSN).

Within the reporting entity, the appropriate assigned staff (e.g. registrar and abstractor) MUST have access to a complete and valid SSN for every case reported to the FCDS, regardless of cancer program affiliation, health care network policy, corporate policy or local institutional policy restricting access to these data. Reportable cancers MUST be submitted to the FCDS with full SSN. There are no exceptions to this reporting rule.

The number of unknown SSNs submitted to the FCDS must be kept to an absolute minimum. Partial SSN (last 4-digits or last 6-digits) and IT or billing system generated proxy SSN are not acceptable and will be rejected if uploaded to the FCDS. Operationally, the FCDS is required to match and consolidate cancer cases to accurately determine the cancer burden in the state. Cancer burden statistics disseminated from the FCDS are integral to local, state, and national cancer prevention and intervention efforts.

For more information on current reporting requirements to the FCDS and specific coding instructions, please reference the Florida Cancer Data System Data Acquisition Manual (FCDS DAM). Specifically, within the 2018 FCDS DAM, Section II pages 69-70, the collection and coding of social security number (SSN) is outlined.

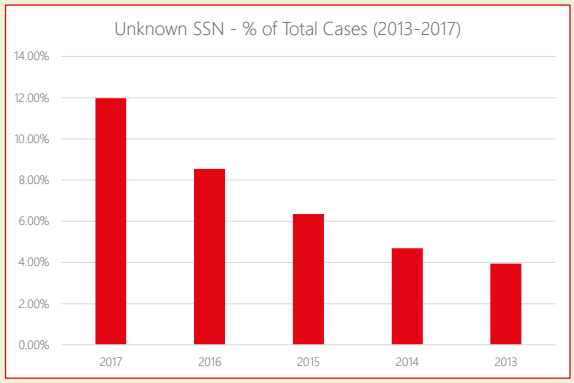
Thank you for your continued support of Florida's statewide cancer surveillance and registry. If you should have any further questions please contact Gary Levin at (305) 243-4073 or glevin@med.miami.edu.

Sincerely,

Tara Hylton, MPH
Cancer Registry Project Director
Public Health Research
Division of Community Health Promotion
Florida Department of Health

Florida Department of Health
Division of Community Health Promotion
4052 Bald Cypress Way, Bin A-14 • Tallahassee, FL 32399
PHONE: 850/245-4585
FloridaHealth.gov

Accredited Health Department, Public Health Accreditation Board



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Open Session Outline

- Introduction to Open Session - Standards & Reporting for 2018/2019/2020
  - S. Peace – FCDS & Central Registry Perspective on Changes
  - NAACCR Survey (March 2019) State Readiness for 2018
  - Training, Software Availability, Abstractor Expectations, Managing and Effect on Deadlines, QC & Data Quality, Use of Contractors, State/National Calls for Data, New Data Items, New EDITS, Priorities, Monitoring Incoming Abstracts
- CDC NPCR Program – Managing 2018-2020 Changes
  - L. Douglas – NPCR & National Registry Perspective on Changes
- Expert Registry Panel – Problems, Delays, Solutions, Hints
  - H. Burner – 2018 Implementation Effects on Large CoC-Accredited Network Registry - CRStar
  - A. Ruiz – 2018 Implementation Effects on Small Network Registry - CRStar
  - K. King – 2018 Implementation Effects on Medium Network Registry - METRIQ
- Round Table Open Discussion on Failures/Successes of 2018 Implementation
  - CNeXT and Oncolog User Feedback on Implementation Effects and your software
  - Cancer Reporting from Non-Accredited Hospitals, Surgery Centers, and Radiation Centers
  - Independent Contract Abstractor and Interim Staffing Companies Feedback on Implementation Effects
  - Summary of Current Status of Florida Registry Reporting to FCDS – Training, Delays, Deadlines, Other Feedback

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FCDS & Central Registry Perspective on Changes

START SENDING FCDS YOUR 2018 CASES IMMEDIATELY

FCDS is currently 150,000 cases behind in receiving 2018 cases from Hospitals.

We only have until 2021 to get caught up with abstracting and processing before things change again…

Folks who have outstanding 2017 cases need to get help.

Folks who have large caseloads probably need help.

The FCDS Abstractor Code Test, FCDS EDITS, and FCDS QC Reviews can only go so far to check on proper use of new manuals, new instructions, new codes, overuse of NOS codes, whether or not they are following all of the Florida Rules, etc.

Use CAUTION when hiring interim staff, contractors, or contract staffing agencies to help with your backlog. They often use brand new CTRs unfamiliar with Florida Requirements, limited training, and provide limited if any supervision or instruction on using new manuals/rules.

You are ultimately responsible to monitor their data quality, completeness, casefinding, not reportable cases for AHCA, etc. If you do not keep an eye on their data quality – you will be making lots of corrections after they are gone. Again, FCDS can only do so much to identify problems.

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NAACCR Survey (March 2019) central registry Readiness for 2018

Are you able to receive 2018 cases right now (March 2019)?

	Yes	No	Don't know/ didn't answer
SEER*DMS	9	0	1
Registry Plus	2	13	0
Rocky Mountain	4	5	0
In-house	5	2	0
Other	0	3	1
TOTAL	20 (45%)	23 (52%)	1 (2%)

Are you able to process 2018 cases right now (March 2019)?

	Yes	No	Don't know/ didn't answer
SEER*DMS	8	0	2
Registry Plus	0	12	3
Rocky Mountain	2	7	0
In-house	2	2	3
Other	0	2	1
TOTAL	12 (27%)	23 (52%)	9 (20%)

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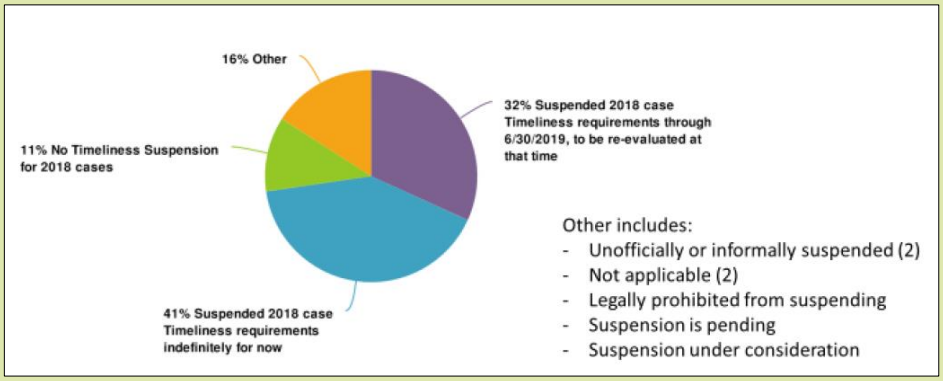
NAACCR Survey (March 2019) Central Registry Readiness for 2018

Has your registry suspended reporting timelines requirements?



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NAACCR Survey (March 2019) Central Registry Readiness for 2018

Has your registry been able to assess training needs/issues?
Why Not?

- Impossible to assess training needs until 2018 case processing begins. Only then will we have the data necessary to provide feedback to registrars, trainers, and state registries that will enable us to assess how well registrars learned requirements, new data items, new codes, new rules and new instructions.
- Posted webinars are outdated and instructions changed.
- Solid Tumor Rules in particular are questionable and have been updated numerous times and again for 2019…very confusing!
- Training was so long ago it has been forgotten.
- Too much of a moving target as requirements, standards, instructions, manuals, and information from trainings keep changing and there is no one central repository for info.
- Contradictory information from NAACCR, CoC, and CDC

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NAACCR Survey (March 2019) Central Registry Readiness for 2018

Adverse impacts of the delay, as synthesized from comments
(each of these was identified by numerous registries)

- Incomplete data leading to artificially low rates
- Data quality problems generally
- Delay in mandated reports
- Delay in scheduled linkages, or incomplete linkages
- Delay in existing and proposed research projects
- Delay in workers' compensation claims
- Expectation of negative press/bad public relations
- Need to generate warning messages to attach to all files/reports/analyses

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KNOWN ISSUES "Proceed with caution"

- Training Issues
- Software Availability
- New Data Items Required
- Volumes of New Manuals/Instructions
- FCDS EDITS Metafile and National Metafiles
- Monitoring & QC of Incoming Abstracts
- Managing Expectations
  - Facility Administration for Production
  - Competing Priorities - CoC and State Registries
  - NCDB and RQRS for Approved Cancer Programs
  - FCDS Reporting and Data Quality Expectations
  - NAACCR and CDC NPCR Calls for Data
  - Abstractor Expectations – time, priorities, management, oversight
  - REMOTE ABSTRACTORS have little to no oversight but still need it.
- Managing Deadlines – Florida & CDC Deadlines + NCDB & RQRS Deadlines
- APPROACH With CAUTION – Using Contractors & Interim Staffing Organizations

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The Aftermath of Introducing Major Standard Changes - 2018

51

2019 and 2020

On April 4, 2019 cancer surveillance leadership from the ACoS Cancer Programs, the Canadian Council of Cancer Registries, NAACCR, NCRA, NPCR and SEER met to discuss potential changes in cancer surveillance data collection for the calendar year 2020.

Considering the significant delays in the capacity of registries to process 2018 data, the burden that these changes has placed on central and hospital cancer registries, and other factors, the High Level Strategic Group voted not to implement any changes to data collection requirements or the data exchange layout in 2020.

This means that NAACCR Data Standards and Data Dictionary, Volume II, Version 18 will remain in effect through December 31, 2020.

It is our hope that the decision to postpone any further changes until 2021 or later will allow the registry community to focus on the ongoing implementation challenges and the urgent backlog in collection and processing of 2018 cases.

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2019 and 2020

Improved Clarity and Improved Performance
Make - Things - Better

Manuals, Instructions, Coding, Edits and Training
More Experience and Improved Feedback

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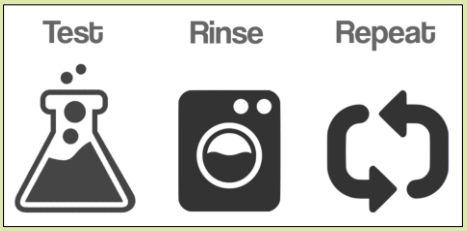
2019 and 2020

The High Level Strategic Group includes leadership from the ACoS Cancer Programs, NCRA, NPCR, and SEER who meet and discuss potential changes and new requirements in cancer surveillance data collection and to assess the impact of any major changes on data collection staff (registrars) and state central cancer registries before approving any major changes.



54

Now is the "CALM BEFORE THE STORM"

- Eventually, FCDS will receive these delayed150,000 cases for 2018. We anticipate receiving them in larger amounts over a shorter period of time than we are used to…and we anticipate that after FCDS Staff process, edit, correct, un-duplicate, force, consolidate, follow-back, and QC the data; we will find areas that need attention and training.
- FCDS anticipates our registries will still be 'late' to abstract and submit cases for 2019 admissions and diagnoses. But, we will get a little closer than for 2018.
- By 2020, we hope most abstracting will be a little more realistically up-to-date.
- 2018-2019 National Cancer Statistics will also be affected. So, what you do and what we do at FCDS and across the country following the 2018 year of major changes is causing ripple effect…until such time as we can all get back on schedule.
- FCDS. DOH and CDC will all be monitoring timelines and data quality more so than ever in an effort to keep track of what is and is not reasonable to ask of registries and registrars in Florida and elsewhere.
- But, we all should expect another big wave of change in 2021. It is already in the works.

55

2021 – All Bets are off…

More Data Requirements – NPCR/SEER/CoC
More SSDIs – Changes to Solid Tumor Rules
New ICD-O-3 Updates & New Staging Requirements

New Research to Add New Requirements in Diagnostics (Imaging and Histology), Biomolecular Genetics, Lab Tests, Anti-Neoplastic Agents, etc.

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Change Saturation

- Change Saturation occurs when there is so much change going on in a field or set of projects/standards that negatively impacts individuals and your organization…compounding the effects of 'change disruption' – it's real.
- Change Saturation most often occurs because no one contact in the organization(s) keeps a "portfolio" view of all the change efforts underway.
- When a project team focuses exclusively on their own set of changes, they do not see how their efforts collide with other changes underway. ICD-O-3, MP/H Rules, Staging, SSDI's, EDITS, Tumor Data Consolidation, etc.
- This is how and why our standard setting organizations (SEER, CoC, AJCC, NAACCR) got so far behind and then had to go back & revise 2018 'stuff'.
- Change Saturation has CONSEQUENCES…
  - Individuals – apathy, frustration, stress, fatigue, burnout, confusion, skepticism, cynicism, lack of productivity, and disengagement with more resistance to change.
  - Projects – delay/failure in product completion and availability (manuals, instructions, software, edits, training) and disharmony with products and projects with interwoven requirements needed to work.
  - Organization – turnover, decline in productivity, increased absenteeism, loss of focus and negative morale – requires management of entire portfolio of change

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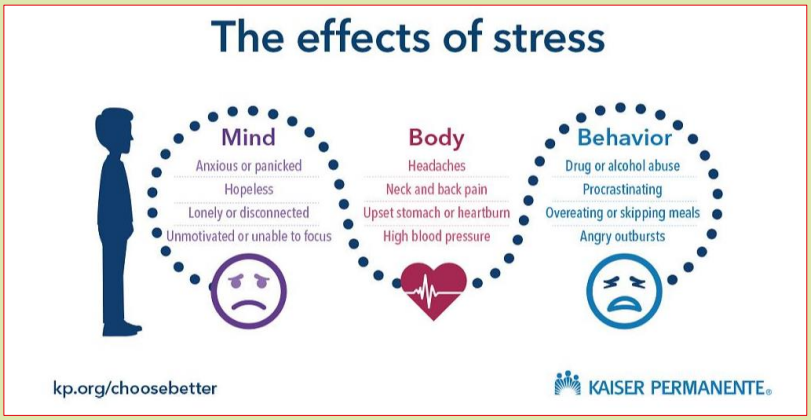
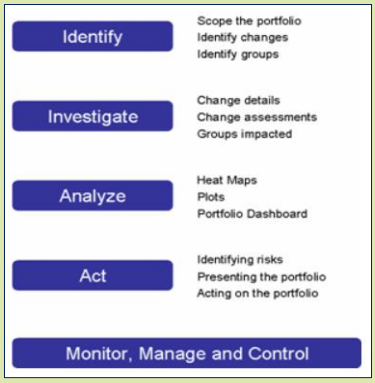
Change Saturation



58

Recommendations setting priorities - managing backlogs - monitoring results

- Keep Administration/Managers Apprised of Current Status
- Set Facility Abstracting Priorities by Year/Month of Service
- Congratulate Your Staff for Every Month Completed !!!
- CAUTION: Contract Abstractors & Interim Staffing Services



- DO NOT Set Abstracting Priorities by Cancer Site or Class of Case or RQRS Requirements for Rapid Reporting !!
- Do Not Prioritize Analytic Cases Over Non-Analytic Cases
- DO NOT Simply Default the SSDIs – they are important!!

- DO Verify Casefinding Lists to Avoid Problems with AHCA
- DO Track Data Quality along with Abstract "Production"

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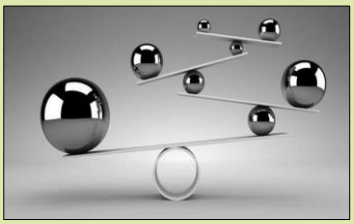
Recommendations setting priorities - managing backlogs - monitoring results



- Work Extra Hours
- Track Your Progress
- Maintain Realistic Goals
- Don't Get Distracted – Focus
- Batch Similar Tasks into Groups
- Try Not to Do the Same Thing All Day
- Recognize Burnout and Deal with it Smartly
- Don't Answer Your Phone Every Time It Rings
- Know Your Priorities & Balance Them to Other Tasks
- Break Down Larger Tasks Into Small Tasks When You Can
- Check Email Periodically – Not Every Time an Email Arrives
- Stay Organized - Access to Manuals & Computer Desktop
- Utilize Available Resources Including FCDS Staff & Peers
- Don't Get Stuck on Things That Create Barrier to Completion

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End of Day 1

Dunbar, United Kingdom – The Art of Balance

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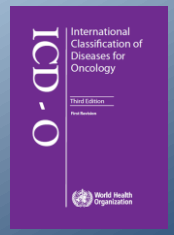
2018-2019 ICD-O-3 Updates and Grade Coding Manual

FCDS Annual Conference
Orlando, Florida
August 1, 2019

Steven Peace, CTR



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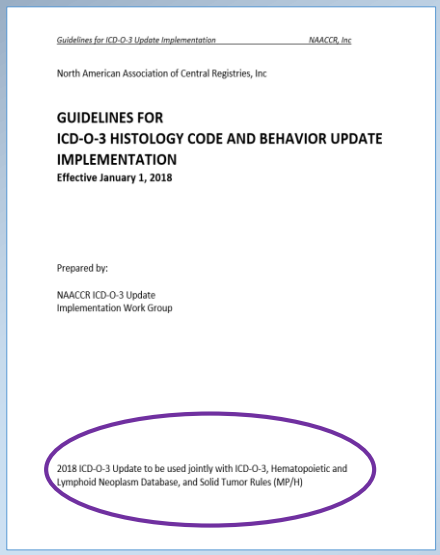
ICD-O-3 Code & Behavior Updates



Guidelines for ICD-O-3 Update Implementation NAACCR, Inc

North American Association of Central Registries, Inc

GUIDELINES FOR
ICD-O-3 HISTOLOGY CODE AND BEHAVIOR UPDATE IMPLEMENTATION
Effective January 1, 2018

Prepared by:

NAACCR ICD-O-3 Update
Implementation Work Group

2018 ICD-O-3 Update to be used jointly with ICD-O-3, Hematopoietic and Lymphoid Neoplasm Database, and Solid Tumor Rules (MP/H)

December 1, 2017
Summary of changes covered in the 2018 ICD-O-3 Update:

The 2018 ICD-O-3 Update Guidelines includes comprehensive tables listing all changes to ICD-O-3 effective for cases diagnosed 1/1/2018 forward. The guidelines also provide background on the project and issues encountered during review of the WHO Classifications of Tumors. Issues not covered in the 2018 update include reportability of GIST and histology codes with terms that include the words "high grade neoplasia" or "high grade dysplasia" or "severe dysplasia" in digestive system sites.

On an international level, the need was recognized in 2010 for updating the morphology section to accurately code contemporary diagnoses described in the terms of the fourth editions of the World Health Organization's Classifications of Hematopoietic and Lymphoid Neoplasms, Tumors of the Central Nervous System, and Tumors of the Digestive System. In September 2011, the International Agency for Research on Cancer (IARC) and the World Health Organization (WHO) released the document *Updates to the International Classification of Diseases for Oncology, third edition (ICDO-3).*

Important information for lung cases: Per WHO 4th Ed Tumors of Lung: In 2011, a new IASLC/ATS/ERS classification of lung adenocarcinoma proposed significant changes to the 2004 WHO classification for resected tumors, including discontinuing the terms bronchioloalveolar carcinoma (BAC).

Beginning with cases diagnosed 1/1/2018 forward, bronchioloalveolar carcinoma (BAC) is no longer the preferred term.

Currently in ICD-O-3, when a topography (C code) is listed in parentheses next to the morphology term, it indicates morphology is most common to that site. It may occur in other sites as well. Many of the new codes, terms, and behaviors listed in this update are site-specific and do not apply to all sites. Applicable C codes will be noted next to the term in **bold** font. These site- and histology-specific combinations will not be added to the "Impossible combination" edit. However, if a site other than the one listed with the morphology code is assigned, the result will be an edit requiring review. This is Interfield Edit 25.

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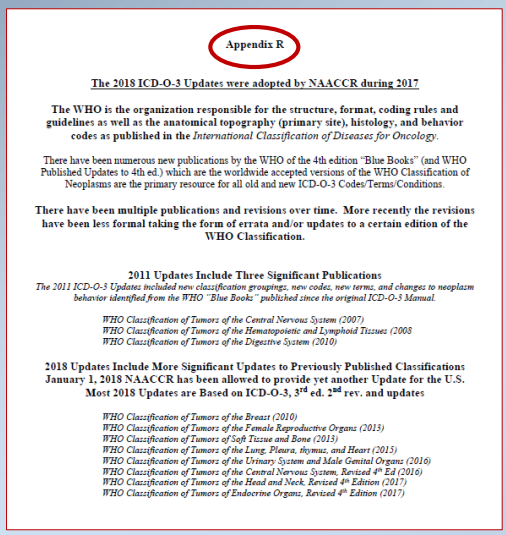
ICD-O-3 Code & Behavior Updates



Appendix R

The 2018 ICD-O-3 Updates were adopted by NAACCR during 2017

The WHO is the organization responsible for the structure, format, coding rules and guidelines as well as the anatomical topography (primary site), histology, and behavior codes as published in the *International Classification of Diseases for Oncology*.

There have been numerous new publications by the WHO of the 4th edition "Blue Books" (and WHO Published Updates to 4th ed.) which are the worldwide accepted versions of the WHO Classification of Neoplasms are the primary resource for all old and new ICD-O-3 Codes/Terms/Conditions.

There have been multiple publications and revisions over time. More recently the revisions have been less formal taking the form of errata and/or updates to a certain edition of the WHO Classification.

2011 Updates Include Three Significant Publications
The 2011 ICD-O-3 Updates included new classification groupings, new codes, new terms, and changes to neoplasm behavior identified from the WHO "Blue Books" published since the original ICD-O-3 Manual.

WHO Classification of Tumors of the Central Nervous System (2007)
WHO Classification of Tumors of the Hematopoietic and Lymphoid Tissues (2008
WHO Classification of Tumors of the Digestive System (2010)

2018 Updates Include More Significant Updates to Previously Published Classifications
January 1, 2018 NAACCR has been allowed to provide yet another Update for the U.S. Most 2018 Updates are Based on ICD-O-3, 3rd ed. 2nd rev. and updates

WHO Classification of Tumors of the Breast (2010)
WHO Classification of Tumors of the Female Reproductive Organs (2013)
WHO Classification of Tumors of Soft Tissue and Bone (2013)
WHO Classification of Tumors of the Lung, Pleura, thymus, and Heart (2015)
WHO Classification of Tumors of the Urinary System and Male Genital Organs (2016)
WHO Classification of Tumors of the Central Nervous System, Revised 4th Ed (2016)
WHO Classification of Tumors of the Head and Neck, Revised 4th Edition (2017)
WHO Classification of Tumors of Endocrine Organs, Revised 4th Edition (2017)

FCDS DAM - Appendix R

- NAACCR Guidelines for ICD-O-3 Update
- ICD-O-3 Codes/Terms – Alpha Order
- ICD-O-3 Codes/Terms – Morphology Order
- 2018 ICD-O-3 Updates in Table Format
- 1/10/2018 Summary of Changes
- 4/4/2018 Summary of Changes

The 2018 ICD-O-3 Update is to be used jointly with the ICD-O-3 Book including All Errata and 2011 Updates, the Hematopoietic & Lymphoid Neoplasm Database, and the Solid Tumor Rules

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IARC/WHO and ICD-O-3.2

http://www.iacr.com.fr/index.php?option=com_content&view=article&id=149:icd-o-3-2&catid=80:newsflashes&Itemid=545

ICD-O-3.2

Created on Tuesday, 23 April 2019 14:05

ICD-O-3.2

The IARC/WHO ICD-O Committee[1] has updated the draft ICD-O-3.1 classification, with new morphology codes and terms from the 4th series of WHO Classification of Tumours (Blue Books). The IACR Working Group on ICD-O Updates[2] has compiled a listing of additi... changes and revisions between ICD-O-3.1 and ICD-O-3.2 as a reference materi... registries.

Both documents have been revised according to the comments received during the consultation period and the final Excel tables are available for download in our Support for registries pages.

The ICD-O-3.2 book in pdf format is in preparation. We would like to thank all registries and individuals for comments provided to the draft versions.

[1] Ian Cree, Jacques Ferlay, Robert Jakob, Brian Rous, Reiko Watanabe, Valerie White, Ariana Znaor
[2] Atul Budukh, Jacques Ferlay, Keri Green, Tomohiro Matsuda, Brian Rous, Ariana Znaor

ICD-O-3

INTERNATIONAL CLASSIFICATION OF DISEASES FOR ONCOLOGY

Third edition Edited by A. Fritz, C. Percy, A. Jack, K. Shanmugaratnam, L. Sobin,D.M. Parkin and S. Whelan

This publication is now available online: http://codes.iarc.fr

ICD-O-3.2 TABLES

The IARC/WHO ICD-O Committee[1] has updated the draft ICD-O-3.1 classification, with new morphology codes and terms from the 4th series of WHO Classification of Tumours (Blue Books). The new version, **ICD-O-3.2, is recommended for use from 2020**. The IACR Working Group on ICD-O Updates[2] has compiled a listing of additions, changes and revisions between ICD-O-3.1 and ICD-O-3.2 as a reference material for cancer registries.

Both documents have been revised according to the comments received ... consultation period and the final tables are available for download here:

A LISTING OF ALL ADDITIONS, CHANGES AND REVISIONS TO THE ICD-O-3 REVISION (ICDO-O-3.1) FOR ICD-O-3.2

ICDO- THIRD EDITION, SECOND REVISION MORPHOLOGY

The ICD-O-3.2 book in pdf format is in preparation. We thank all the individuals and institutions/organizations that provided comments to the draft versions. Their contributions will be acknowledged in the ICD-O-3.2 book, while the individual replies will be provided via email.

[1] Ian Cree, Jacques Ferlay, Robert Jakob, Brian Rous, Reiko Watanabe, Valerie White, Ariana Znaor

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ICD-O-3.2 – complete histology table

International Agency for Research on Cancer
World Health Organization

ICD-O- Third Edition, Second Revision Morphology

ICDO3.2	Level	Term	Code reference	obs	See also	See ...	Includes	Excludes
8173/3	Preferred	Hepatocellular carcinoma, spindle cell variant	(C22.0)					
8173/3	Synonym	Hepatocellular carcinoma, sarcomatoid	(C22.0)					
8174/3	Preferred	Hepatocellular carcinoma, clear cell type	(C22.0)					
8175/3	Preferred	Hepatocellular carcinoma, pleomorphic type	(C22.0)					
8180/3	Preferred	Combined hepatocellular carcinoma and cholangiocarcinoma	(C22.0)					
8180/3	Synonym	Hepatocholangiocarcinoma	(C22.0)					
8180/3	Synonym	Mixed hepatocellular and bile duct carcinoma	(C22.0)					
8190/0	Preferred	Trabecular adenoma						
8190/3	Preferred	Trabecular adenocarcinoma						
8190/3	Synonym	Trabecular carcinoma						
8191/0	Preferred	Embryonal adenoma						
8200/0	Preferred	Eccrine dermal cylindroma	(C44._)					
8200/0	Related	Cylindroma of skin	(C44._)					
8200/0	Related	Cylindroma of breast	(C50._)					
8200/0	Related	Turban tumor	(C44.4)					
8200/3	Preferred	Adenoid cystic carcinoma						
8200/3	Synonym	Cylindroma, NOS		[obs]				(except of skin or breast
8200/3	Synonym	Adenocarcinoma, cylindroid		[obs]				
8200/3	Synonym	Adenocystic carcinoma						
8200/3	Related	Bronchial adenoma, cylindroid	(C34._)	[obs]				
8200/3	Related	Thymic carcinoma with adenoid cystic carcinoma-like features	(C37.9)					
8201/2	Preferred	Cribriform carcinoma in situ	(C50._)					
8201/2	Synonym	Ductal carcinoma in situ, cribriform type	(C50._)					
8201/3	Preferred	Cribriform carcinoma, NOS						
8201/3	Synonym	Ductal carcinoma, cribriform type	(C50._)					
8201/3	Related	Cribriform comedo type carcinoma	(C18._, C19.9, C20.9)					
8201/3	Synonym	Adenocarcinoma, cribriform comedo type	(C18._, C19.9, C20.9)					

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ICD-O-3.2 – changes only

IACR International Association of Cancer Registries

International Agency for Research on Cancer
World Health Organization

A LISTING OF ALL ADDITIONS, CHANGES, AND REVISIONS TO THE INTERNATIONAL CLASSIFICATION OF DISEASES FOR ONCOLOGY, THIRD EDITION, 1st REVISION (ICD-O-3.1) FOR ICD-O-3.2
compiled by the IACR Working Group on ICD-O updates
(Atul Budukh, Keri Green, Jacques Ferlay, Tomohiro Matsuda, Brian Rous, Ariana Znaor; with contribution by Reiko Watanabe, IARC), approved by IARC/WHO ICD-O Committee

Status	Level	Histology	Behavior	Term
New related term	Related	8013	3	Combined large cell neuroendocrine carcinoma
New related term	Related	8020	3	Carcinoma, poorly differentiated, NOS
New related term	Related	8020	3	Anaplastic undifferentiated carcinoma
New related term	Related	8020	3	Dedifferentiated carcinoma
New code and term	Preferred	8023	3	Nuclear protein in testis (NUT) associated carcinoma
New synonym	Synonym	8023	3	NUT carcinoma
New synonym	Synonym	8023	3	NUT midline carcinoma
New synonym	Synonym	8041	3	Small cell carcinoma pulmonary type
New related term	Related	8044	3	Small cell carcinoma, hypercalcemic type (C56.9)
New code and term	Preferred	8054	0	Warty dyskeratoma
Change of code (was 8051/3)	Preferred	8054	3	Warty carcinoma
Change of code (was 8051/3)	Synonym	8054	3	Condylomatous carcinoma
New related term	Related	8054	3	Warty-basaloid carcinoma
New behavior code and term	Preferred	8070	0	Actinic keratosis
New behavior code and term	Related	8070	0	Arsenical keratosis
New behavior code and term	Related	8070	0	PUVA keratosis
New behavior code and term	Preferred	8071	2	Differentiated intraepithelial neoplasia
New behavior code and term	Related	8071	2	Differentiated penile intraepithelial neoplasia (PeIN) (C60._)

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IACR International Association of Cancer Registries

International Agency for Research on Cancer
World Health Organization

A LISTING OF ALL ADDITIONS, CHANGES, AND REVISIONS TO THE INTERNATIONAL CLASSIFICATION OF DISEASES FOR ONCOLOGY, THIRD EDITION, 1st REVISION (ICD-O-3.1) FOR ICD-O-3.2
compiled by the IACR Working Group on ICD-O updates
(Atul Budukh, Keri Green, Jacques Ferlay, Tomohiro Matsuda, Brian Rous, Ariana Znaor; with contribution by Reiko Watanabe, IARC), approved by IARC/WHO ICD-O Committee

Status	Level	Histology	Behavior	Term
New related term	Related	8140	3	Parathyroid carcinoma (C75.0)
New related term	Related	8140	3	Acinar adenocarcinoma of prostate (C61.9)
New synonym	Synonym	8144	3	Adenocarcinoma, enteric
New synonym	Synonym	8144	3	Mucinous carcinoma, intestinal type
New term	Preferred	8150	0	Pancreatic neuroendocrine microadenoma (C25.4)
Move to synonym	Synonym	8150	0	Pancreatic endocrine tumor, benign (C25.4)
New preferred term	Preferred	8150	3	Pancreatic neuroendocrine tumor, nonfunctioning (C25.4)
Change of behavior code (from 1)	Synonym	8150	3	Pancreatic endocrine tumor, NOS (C25.4)
Change of behavior code (from 0)	Related	8150	3	Islet cell adenoma (C25.4)
Change of behavior code (from 0)	Related	8150	3	Islet cell adenomatosis (C25.4)
Change of behavior code (from 0)	Related	8150	3	Nesidioblastoma (C25.4)
Change of behavior code (from 1)	Related	8150	3	Islet cell tumor, NOS (C25.4)
Move to related	Related	8150	3	Islet cell adenocarcinoma (25.4)
Move to related	Related	8150	3	Islet cell carcinoma (C25.4)
Change of behavior code (from 0)	Preferred	8151	3	Insulinoma, NOS (C25.4)
Change of behavior code (from 0)	Synonym	8151	3	Beta cell adenoma (C25.4)
Change of behavior code (from 1)	Preferred	8158	3	ACTH-producing tumor
Change of behavior code (from 1)	Related	8158	3	Endocrine tumor, functioning, NOS
New related term	Related	8200	3	Thymic carcinoma with adenoid cystic carcinoma-like features (C37.9)
Change of wording	Preferred	8213	0	Serrated adenoma, NOS (C18._)
Change of wording	Related	8213	0	Sessile serrated adenoma, NOS
New synonym	Synonym	8230	3	Solid adenocarcinoma, NOS
New preferred term	Preferred	8240	3	Neuroendocrine tumor, NOS
Move to synonym	Synonym	8240	3	Carcinoid tumor, NOS
Move to synonym	Synonym	8240	3	Neuroendocrine carcinoma, low grade
Move to synonym	Synonym	8240	3	Neuroendocrine carcinoma, well-differentiated
Change of wording	Related	8240	3	Neuroendocrine tumor, grade 1
Move to synonym	Synonym	8240	3	Typical carcinoid
New synonym	Synonym	8244	3	Mixed carcinoid and adenocarcinoma

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ICD-O-3 Code & Behavior Updates

New Site-Associated Codes – Many Specific Only to One Site

Status	ICD-O-3 Morphology Code	Term	Reportable Y/N	Comments
New Term	8720/3	Meningeal melanoma **(C70. _, C71. _)**	Y	
New Term	8575/3	Metaplastic carcinoma of no special type **(C50. _)**	Y	
New Term	8571/3	Metaplastic carcinoma with chondroid differentiation **(C50. _)**	Y	
New Term	8571/3	Metaplastic carcinoma with osseous differentiation **(C50. _)**	Y	
New Term	8575/3	Metaplastic carcinoma with other types mesench differentiation **(C50. _)**	Y	
New Term	8120/3	Microcystic urothelial carcinoma **(C65.9, C6 7. _, C68. _)**	Y	
New code/term	8265/3	Micropapillary adenocarcinoma **(C34. _)**	Y	Cases diagnosed prior to 1/1/2018 use code 8507/3. Code 8265 is not valid for C50._. Use 8507 for micropapillary adenocarcinoma in breast primaries
New code/term	8265/3	**Micropapillary carcinoma, NOS (C18. _, C19.9, C20.9, C34. _)**	Y	Cases diagnosed prior to 1/1/2018 use code 8507/3. Code 8265 is not valid for C50._. Use 8507 for micropapillary adenocarcinoma in breast primaries
New code/term	8023/3	Midline carcinoma of children and young adults with NUT rearrangement **(C30.0, C31.9, C34. _)**	Y	
New code/term	8257/3	**Minimally invasive adenocarcinoma, mucinous (C34. _)**	Y	
New code/term	8256/3	**Minimally invasive adenocarcinoma, non-mucinous (C34. _)**	Y	

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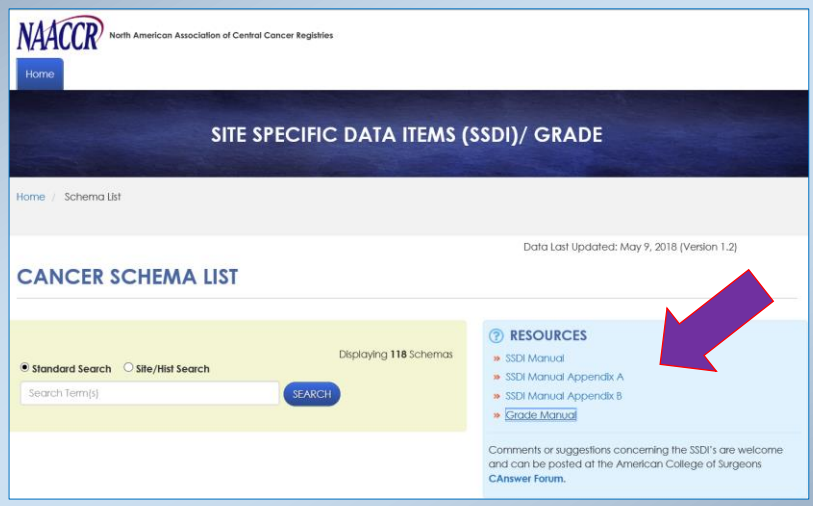
Back to Coding Grade



https://apps.naaccr.org/ssdi/list/

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Back to Coding Grade

- **Clinical Grade** - the grade of a solid primary tumor before any treatment. Treatment may include surgical resection, systemic therapy, radiation therapy, or neoadjuvant therapy. NOTE: All surgical procedures are not treatment, e.g. TURB and endoscopic biopsies.

- **Pathological Grade** - the grade of a solid primary tumor that has been surgically resected and for which no neoadjuvant therapy was administered. If AJCC pathological staging is being assigned, the tumor must have met the surgical resection requirements in the AJCC manual. This may include the grade from the clinical workup, as all information from diagnosis (clinical staging) through the surgical resection is used for pathological staging.

- **Post-Therapy Grade** - the grade of a solid primary tumor that has been resected following neoadjuvant therapy. If AJCC post-therapy staging is being assigned, the tumor must have met the surgical resection requirements for yp in the AJCC manual. Neoadjuvant therapy must meet guidelines or standards, and not be that given for variable or unconventional reasons as noted in the AJCC manual.

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Back to Coding Grade

The tables for grade have been re-structured for 2018. There may be a combination of numeric and alphabetic codes within the same table, according to this template.

Template for a Cancer-Specific Grade Table

Code	Grade Description
1	Site-specific grade system category
2	Site-specific grade system category
3	Site-specific grade system category
4	Site-specific grade system category
5	Site-specific grade system category
L	Low grade
H	High grade
M	Site-specific grade system category
S	Site-specific grade system category
A	Well differentiated
B	Moderately differentiated
C	Poorly differentiated
D	Undifferentiated and anaplastic
8	Not applicable (Hematopoietic neoplasms only)
9	Grade cannot be assessed; Unknown
Blank	(Post-therapy only)

Codes 1-5, L, H, M, S, and 9 all represent AJCC recommended grading systems.

Codes 1-5 are applicable for the AJCC-recommended grading systems. Not all grade tables will have five codes; most will have three or four. GX is coded to 9.

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Back to Coding Grade

Cancer Registry Coding of the Cell Indicator or Grade for Hematopoietic and Lymphoid Neoplasms (9590-9992)

Historically the cell lineage indicator (B-cell, T-cell, Null cell, NK-cell) was collected in the Grade data item. Cell lineage indicator/grade for hematopoietic and lymphoid neoplasms will no longer be collected for cases diagnosed 1/1/2018 and forward.

Note: *The Lymphoma Ocular Adnexa chapter in the AJCC manual has a defined grading system for the follicular histologies. Grade is to be assigned to these according to the Lymphoma Ocular Adnexa chapter, chapter 71. The primary sites and follicular histologies included in chapter 71 are as follows.*

- *Applicable primary sites: C441, C690, C695, C696*
- *Applicable histologies: 9690/3, 9691/3, 9695/3, 9698/3*
- *Grade for all other histologies collected in the Lymphoma Ocular Adnexa chapter will be coded to 9*

For all other cases with histologies 9590/3-9992/3, the three grade fields should be coded '8' for not applicable.

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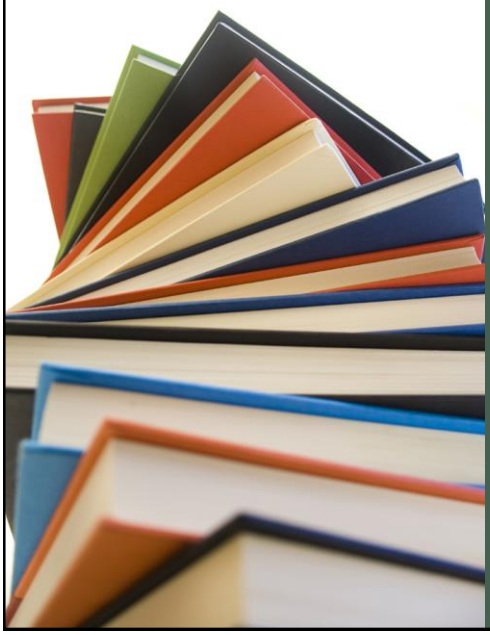

2019 Solid Tumor Rules:

Navigating Multiple Revisions, Using the General Instructions, Incorporating the ICD-O-3 Updates, Using the Tables & Important Highlights

FCDS Annual Conference
August 1, 2019
Orlando, Florida

Steven Peace, CTR

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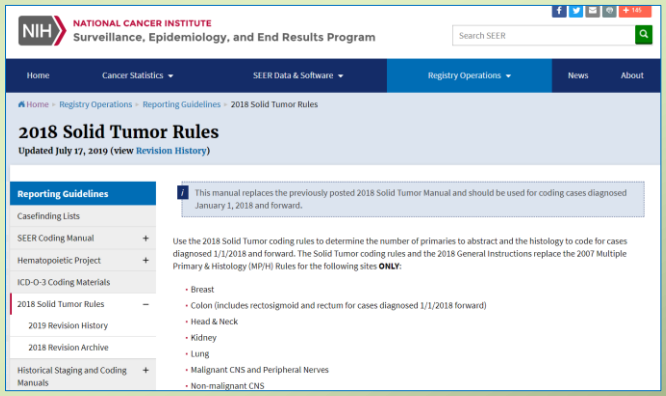
2018 Solid Tumor MP/H Rules

https://seer.cancer.gov/tools/solidtumor/

Solid Tumor Rules - Revision History

1. 6/25/2018
2. 6/28/2018
3. 7/3/2018
4. 7/19/2018
5. 7/31/2018
6. 8/2/2018
7. 8/8/2018
8. 8/13/2018
9. 8/16/2018
10. 8/20/2018
11. 8/23/2018
12. 9/11/2018
13. 10/12/2018
14. January 2019
15. July 2019



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2018 Solid Tumor MP/H Rules

https://seer.cancer.gov/tools/solidtumor/

Download the Solid Tumor Modules

All sections were updated on July 17, 2019.

- Complete 2018 Solid Tumor Manual (PDF, 5.6 MB)
  - General Instructions (PDF, 674 KB)
  - Head & Neck (PDF, 1.1 MB)
  - Colon (PDF, 972 KB)
  - Lung (PDF, 958 KB)
  - Breast (PDF, 1.3 MB)
  - Kidney (PDF, 894 KB)
  - Urinary Sites (PDF, 1.8 MB)
  - Malignant CNS and Peripheral Nerves (PDF, 1.1 MB)
  - Non-Malignant CNS Tumors (PDF, 1.2 MB)

Use the 2007 General Instructions, Other Sites and Cutaneous Melanoma for cases diagnosed 2007-2020.

- 2007 General Instructions (PDF, 516 KB)
- 2007 Other Sites (PDF, 644 KB)

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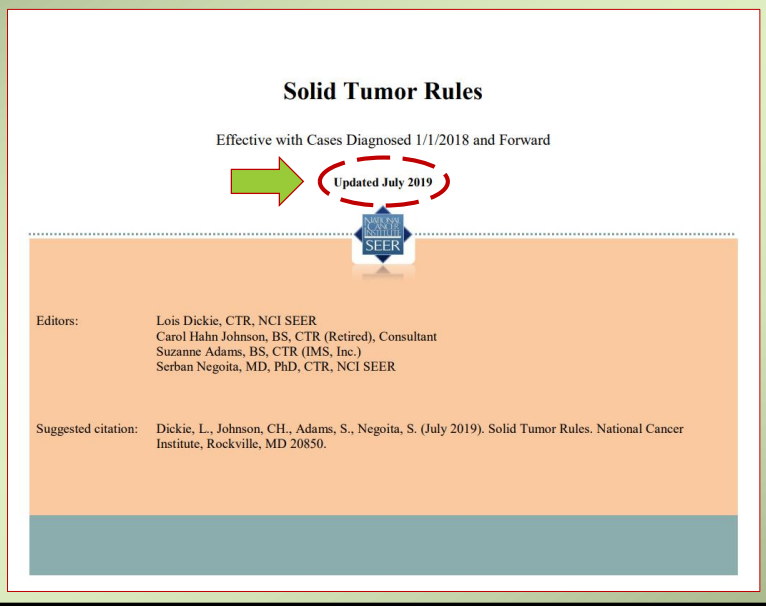
2018 Solid Tumor MP/H Rules



Solid Tumor Rules

Effective with Cases Diagnosed 1/1/2018 and Forward

Updated July 2019

Editors: Lois Dickie, CTR, NCI SEER
Carol Hahn Johnson, BS, CTR (Retired), Consultant
Suzanne Adams, BS, CTR (IMS, Inc.)
Serban Negoita, MD, PhD, CTR, NCI SEER

Suggested citation: Dickie, L., Johnson, CH., Adams, S., Negoita, S. (July 2019). Solid Tumor Rules. National Cancer Institute, Rockville, MD 20850.

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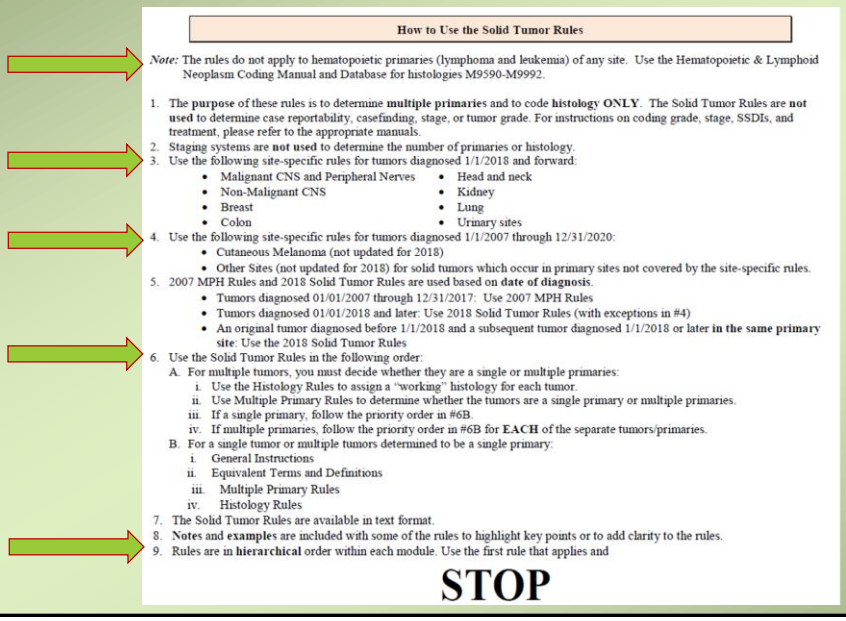
General Instructions



How to Use the Solid Tumor Rules

Note: The rules do not apply to hematopoietic primaries (lymphoma and leukemia) of any site. Use the Hematopoietic & Lymphoid Neoplasm Coding Manual and Database for histologies M9590-M9992.

1. The **purpose** of these rules is to determine **multiple primaries** and to code **histology ONLY**. The Solid Tumor Rules are **not used** to determine case reportability, casefinding, stage, or tumor grade. For instructions on coding grade, stage, SSDIs, and treatment, please refer to the appropriate manuals.
2. Staging systems are **not used** to determine the number of primaries or histology.
3. Use the following site-specific rules for tumors diagnosed 1/1/2018 and forward:
   - Malignant CNS and Peripheral Nerves
   - Non-Malignant CNS
   - Breast
   - Colon
   - Head and neck
   - Kidney
   - Lung
   - Urinary sites
4. Use the following site-specific rules for tumors diagnosed 1/1/2007 through 12/31/2020:
   - Cutaneous Melanoma (not updated for 2018)
   - Other Sites (not updated for 2018) for solid tumors which occur in primary sites not covered by the site-specific rules.
5. 2007 MPH Rules and 2018 Solid Tumor Rules are used based on **date of diagnosis**.
   - Tumors diagnosed 01/01/2007 through 12/31/2017: Use 2007 MPH Rules
   - Tumors diagnosed 01/01/2018 and later: Use 2018 Solid Tumor Rules (with exceptions in #4)
   - An original tumor diagnosed before 1/1/2018 and a subsequent tumor diagnosed 1/1/2018 or later **in the same primary site**: Use the 2018 Solid Tumor Rules
6. Use the Solid Tumor Rules in the following order:
   A. For multiple tumors, you must decide whether they are a single or multiple primaries:
      i. Use the Histology Rules to assign a "working" histology for each tumor.
      ii. Use Multiple Primary Rules to determine whether the tumors are a single primary or multiple primaries.
      iii. If a single primary, follow the priority order in #6B.
      iv. If multiple primaries, follow the priority order in #6B for **EACH** of the separate tumors/primaries.
   B. For a single tumor or multiple tumors determined to be a single primary:
      i. General Instructions
      ii. Equivalent Terms and Definitions
      iii. Multiple Primary Rules
      iv. Histology Rules
7. The Solid Tumor Rules are available in text format.
8. **Notes** and **examples** are included with some of the rules to highlight key points or to add clarity to the rules.
9. Rules are in **hierarchical** order within each module. Use the first rule that applies and

STOP

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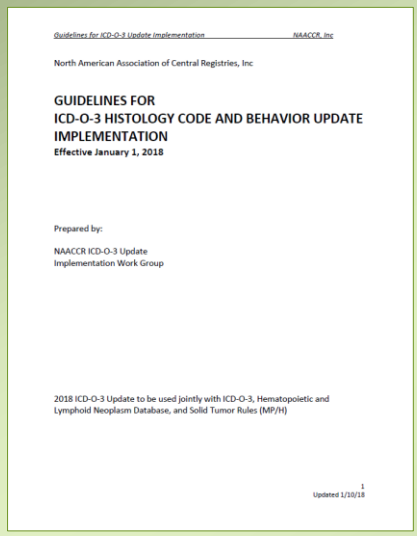
Solid Tumor Manual & ICD-O-3 Updates



Guidelines for ICD-O-3 Update Implementation *NAACCR, Inc*

North American Association of Central Registries, Inc

GUIDELINES FOR
ICD-O-3 HISTOLOGY CODE AND BEHAVIOR UPDATE IMPLEMENTATION
Effective January 1, 2018

Prepared by:

NAACCR ICD-O-3 Update
Implementation Work Group

2018 ICD-O-3 Update to be used jointly with ICD-O-3, Hematopoietic and Lymphoid Neoplasm Database, and Solid Tumor Rules (MP/H)

1
Updated 1/10/18

2018 ICD-O-3 New Codes, Behaviors, and Terms-Updated 8/22/18

Status	istology V	eh	label	Reportab
New term	8010	3	Urachal carcinoma (C65.9, C66.9, C67._, C68._)	Y
New term	8013	3	Combined large cell neuroendocrine carcinoma (C34._, C37.9)	Y
New term & code	8023	3	Midline carcinoma of children and young adults with NUT rearrangement (C30.0, C31.9, C34._)	Y
New term & code	8023	3	NUT carcinoma (C30.0, C31.9, C34._)	Y
New term & code	8023	3	NUT midline carcinoma (C30.0, C31.9, C34._)	Y
New term	8041	3	High-grade neuroendocrine carcinoma (C54._, C55.9)	Y
New term	8041	3	Neuroendocrine carcinoma, poorly differentiated (C50._)	Y
New term	8041	3	Small cell carcinoma pulmonary type (C56.9)	Y
New term	8044	3	Small cell carcinoma, hypercalcemic type (C56.9)	Y
New term & code	8054	3	Condylomatous carcinoma (C60.0-C60.2, C60.9)	Y
New term & code	8054	3	Warty carcinoma (C60.0-C60.2, C60.9)	Y
Behavior code/term	8071	2	Differentiated penile intraepithelial neoplasia (C60._)	N
Behavior code/term	8071	2	Differentiated-type vulvar intraepithelial neoplasia (C51._)	N
New term & code	8085	3	Squamous cell carcinoma, HPV-positive (C01.9, 09.9,C10.2, C10.3, C10.8, C10.9, C31.0–C31.3, C31.9)	Y
New term & code	8086	3	Squamous cell carcinoma, HPV-negative (C01.9, C09.9, C10.2, C10.3, C10.8, C10.9, C31.0–C31.3, C31	Y
New term	8120	3	Lipid-rich urothelial carcinoma (C65.9, C66.9, C67._, C68._)	Y
New term	8120	3	Microcystic urothelial carcinoma (C65.9, C66.9, C67._, C68._)	Y
New term	8120	3	Nested urothelial carcinoma (C65.9, C66.9, C67._, C68._)	Y
New term	8120	3	Squamotransitional cell carcinoma (C53._)	Y
New term	8120	3	Urothelial carcinoma with divergent differentiation (C65.9, C66.9, C67._, C68._)	Y
New term	8120	3	Urothelial carcinoma with squamous differentiation (C65.9, C66.9, C67._, C68._)	Y
New term	8120	3	Urothelial carcinoma with trophoblastic differentiation (C65.9, C66.9, C67._, C68._)	Y
New term	8120	3	Clear cell (glycogen-rich) urothelial carcinoma (C65.9, C66.9, C67._, C68._)	Y
New term	8140	3	Minimally invasive adenocarcinoma, NOS (C34._)	Y
New term	8140	3	Endocervical adenocarcinoma usual type (C53._)	Y
New term	8140	3	Acinar adenocarcinoma (C61.9 ONLY)	Y
New term	8144	3	Enteric adenocarcinoma (C34. 0, C65.9, C66.9, C67._, C68._)	Y
New term	8144	3	Intestinal-type adenocarcinoma (C30.0, C53._)	Y
New term	8144	3	Mucinous carcinoma, intestinal type (C53._)	Y
New term & code	8158	1	ACTH-producing tumor	N
New term & code	8158	1	Endocrine tumor, functioning, NOS	N
New term & code	8163	3	Adenocarcinoma, pancreatobiliary-type (C24.1)	Y
New term & code	8163	3	Pancreatobiliary-type carcinoma (C24.1)	Y
New term	8200	3	Thymic carcinoma with adenoid cystic carcinoma-like features (C37.9)	Y
Behavior code/term	8213	3	Serrated adenocarcinoma (C18.0, C18.2, C18.9, C19.9, C20.9)	Y
New term	8246	3	Neuroendocrine tumor, well differentiated (C50._)	Y
Behavior code/term	8250	2	Adenocarcinoma in situ, non-mucinous (C34._)	Y
New term	8250	3	Lepidic adenocarcinoma (C34._)	Y
New term	8250	3	Lepidic predominant adenocarcinoma (C34._)	Y

How to Use the Tables

Using the Primary Site Tables - Breast

Terms and Descriptive Language	Site Term and Code
Areolar Nipple Paget disease **without** underlying tumor *Note:* Paget with underlying tumor is coded to the quadrant of breast in which the underlying tumor is located	Nipple **C500**
Above nipple Area extending 1 cm around areolar complex Behind the nipple Below the nipple Beneath the nipple Central portion of breast Cephalad to nipple Infra-areolar Lower central Next to areola NOS Next to nipple Retroareolar Subareolar Under the nipple Underneath the nipple	Central portion of breast **C501**
Superior inner Superior medial Upper inner quadrant (UIQ) Upper medial	Upper inner quadrant of breast **C502**

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How to Use the Tables

Using the Primary Site Tables - Lung

Terminology	Laterality	Site Term and Code
Bronchus intermedius **Carina** **Hilus of lung** **Perihilar**	Bilateral	Mainstem bronchus **C340** *Note*: **Bronchus intermedius** is the portion of the **right mainstem bronchus** between the upper lobar bronchus and the origin of the middle and lower lobar bronchi
Lingula of lung	Left	Upper lobe **C341**
Apex **Apex of lung** **Lung apex** **Pancoast tumor** **Superior lobar bronchus** **Upper lobe bronchi**	Bilateral	Upper lobe **C341**
Middle lobe **Middle lobe bronchi**	Right	Middle lobe **C342**
Base of lung **Lower lobar bronchus** **Lower lobe** **Lower lobe bronchi** **Lower lobe segmental bronchi**	Bilateral	Lower lobe **C343**
Overlapping lesion of lung	Bilateral	Overlapping lesion of lung **C348** *Note*: **One** lesion/tumor which **overlaps two or more** lobes

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How to Use the Tables

Using the Primary Site Tables - Head & Neck

Table Index

Table Number	Table Title
Table 1	Tumors of Nasal Cavity **C300** Paranasal Sinuses **C310-C313, C318, C319**
Table 2	Tumors of Nasopharynx **C110, C111 (posterior wall of nasopharynx only), C112, C113, C118, C119**
Table 3	Pyriform Sinus **C129** Tumors of Hypopharynx **C130-C132, C138, C139** Larynx **C320-C323, C328, C329** Trachea **C339** and Parapharyngeal Space **C139**
Table 4	Tumors of Oral Cavity and mobile tongue **C020-C024, C028, C029, C030, C031, C039, C040, C041, C048, C049, C050-C052, C058, C059, C060-C062, C068, C069**
Table 5	Tumors of Oropharynx **C100-C104, C108 C109** Base of Tongue **C019** Tonsils **C090, C091, C098, C099** Adenoids/pharyngeal tonsil only **C111**
Table 6	Tumors of Salivary Glands **C079, C080, C081, C088, C089**
Table 7	Tumors of Odontogenic and Maxillofacial Bone (Mandible **C410**, Maxilla **C411**)
Table 8	Tumors of Ear **C301** and External auditory canal **C442**
Table 9	Paraganglioma of Carotid body, Larynx, Middle Ear, Vagal nerve **C479**
Table 10	Paired Sites

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How to Use the Tables

Using the Primary Site Tables - Head & Neck

Table 4: Tumors of Oral Cavity and Mobile Tongue

Table 4 lists the more common histologies for the following head and neck subsites:

The **oral cavity category** includes the following:

Mobile Tongue:
- **C020** Dorsal surface of tongue NOS
- **C021** Border of tongue
- **C022** Ventral surface of tongue NOS
- **C023** Anterior 2/3 of tongue NOS
- **C024** Lingual tonsil
- **C028** Overlapping lesion of tongue
- **C029** Tongue NOS

Gum:
- **C030** Upper gum, maxillary gingiva, upper alveolar mucosa, upper alveolar ridge mucosa, upper alveolus, upper gingiva
- **C031** Lower gum mandibular gingiva, lower alveolar mucosa, lower alveolar ridge mucosa, lower alveolus, lower gingiva
- **C039** Gum NOS, gingiva NOS, alveolar mucosa NOS, alveolar ridge mucosa NOS, alveolar NOS periodontal tissue, tooth socket

Floor of Mouth:
- **C040** Anterior floor of mouth
- **C041** Lateral floor of mouth
- **C048** Overlapping lesion floor of mouth
- **C049** Floor of mouth NOS

Palate:
- **C050** Hard palate
- **C051** Soft palate
- **C052** Uvula
- **C058** Overlapping lesion of palate, junction of hard and soft palate
- **C059** Palate NOS, roof of mouth

Other and unspecified parts of Mouth:
- **C060** Cheek mucosa, buccal mucosa, internal cheek

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How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables Colon/Rectum/Rectosigmoid

Column 1 contains specific and NOS histology terms.
- **Specific** histology terms **do not** have **subtypes/variants**
- **NOS** histology terms **do** have **subtypes/variants**

Column 2 contains **synonyms** for the specific or NOS term. Synonyms have the **same** histology **code** as the specific or NOS term.
Column 3 contains **subtypes/variants** of the **NOS** histology. Subtypes/variants **do not** have the **same** histology code as the NOS term.

Specific and NOS Term and Code	Synonyms for Specific or NOS Term	Subtypes/Variants
Adenocarcinoma 8140 *Note 1*: See Histology Rules for instructions on coding adenocarcinoma **subtypes/variants** arising in a polyp *Note 2*: When the term **intestinal adenocarcinoma** is used to describe a colon primary, it simply means the **appearance** is	Adenocarcinoma, NOS Adenocarcinoma/carcinoma in a polyp NOS (now coded to 8140) Adenocarcinoma/carcinoma in adenomatous polyp (now coded to 8140) Adenocarcinoma/carcinoma in polypoid adenoma (now coded to 8140) Adenocarcinoma/carcinoma in serrated adenoma (now coded to 8140) Adenocarcinoma and mucinous carcinoma, mucinous documented as less than 50% of tumor OR percentage of mucinous	Adenoid cystic carcinoma **8200** Cribriform comedo-type carcinoma/ adenocarcinoma, cribriform comedo-type **8201*** Diffuse adenocarcinoma/carcinoma **8145** Linitis plastica **8142/3** Medullary adenocarcinoma/carcinoma **8510** Micropapillary carcinoma **8265*** Mucinous/colloid adenocarcinoma/carcinoma **8480** Mucoepidermoid carcinoma **8430** Serrated adenocarcinoma **8213***

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How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables
Colon/Rectum/Rectosigmoid

Specific and NOS Term and Code	Synonyms for Specific or NOS Term	Subtypes/Variants
similar to adenocarcinoma seen in the stomach and is coded to adenocarcinoma NOS **8140**	unknown/not documented Adenocarcinoma and signet ring cell carcinoma, percentage of signet ring cell carcinoma documented as less than 50% of tumor OR percentage of signet ring cell carcinoma unknown/not documented Adenocarcinoma/carcinoma in tubular polyp (now coded to 8140) Adenocarcinoma/carcinoma in tubulovillous polyp (now coded to 8140) Adenocarcinoma/carcinoma in villous adenoma (now coded to 8140) Adenocarcinoma in any type of polyp Adenocarcinoma, intestinal type Adenocarcinoma and cribriform carcinoma percentage of cribriform documented as less than 50% of tumor OR percentage of cribriform carcinoma unknown/not documented Adenocarcinoma with mucinous and signet ring cell features Comedocarcinoma Intestinal adenocarcinoma	Signet ring cell/poorly cohesive adenocarcinoma/carcinoma **8490** Superficial spreading adenocarcinoma **8143** Tubulopapillary carcinoma **8263** Undifferentiated adenocarcinoma/carcinoma **8020**
Adenosquamous carcinoma 8560 *Note:* This code **cannot be used** for **adenocarcinoma subtypes/variants** with squamous cell/epidermoid carcinoma	Mixed adenocarcinoma NOS and epidermoid carcinoma Mixed adenocarcinoma NOS and squamous cell carcinoma	

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How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables
Breast

Specific and NOS/NST Terms and Code	Synonyms	Subtypes/Variants
Acinic cell carcinoma 8550	Acinar adenocarcinoma Acinar carcinoma	
Adenoid cystic carcinoma (ACC) 8200	ACC Adenocystic basal cell carcinoma Carcinoma adenoides cysticum Cylindromatous carcinoma	
Adenomyoepithelioma with carcinoma 8983	AME Malignant AME	
Apocrine carcinoma 8401 *Note:* This is a diagnosis that is **EXACTLY** apocrine **carcinoma**, **not** a carcinoma **NST** with apocrine **features**, **differentiation**, or **type.**		
Carcinoma NST 8500 *Note:* Cribriform carcinoma may consist of up to 50% tubular formations. The term cribriform/tubular carcinoma is coded as cribriform carcinoma.	Carcinoma of no special type (ductal/NST) Carcinoma/carcinoma NST with choriocarcinomatous features Carcinoma/carcinoma NST with cribriform features Carcinoma/carcinoma NST with melanotic features Carcinoma/carcinoma NST with signet ring cell differentiation DCIS **8500/2** Duct/ductal carcinoma Duct/ductal carcinoma in situ **8500/2** Duct/ductal carcinoma NOS	Carcinoma with osteoclastic-like stromal giant cells **8035** Cribriform carcinoma **8201/3** Pleomorphic carcinoma **8022/3**

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How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables

Breast

Specific and NOS/NST Terms and Code	Synonyms	Subtypes/Variants
	Duct/ductal carcinoma NST (no special type) Duct/ductal carcinoma with apocrine features Duct/ductal carcinoma with apocrine metaplasia Duct/ductal carcinoma with lobular features Duct/ductal carcinoma with micropapillary features Duct/ductal carcinoma with mucin production Duct/ductal carcinoma with squamous metaplasia Infiltrating ductal carcinoma **8500/3** Invasive carcinoma with micropapillary features **8500/3** Invasive carcinoma not otherwise specified (ductal/NOS) **8500/3** Invasive carcinoma NST with metaplastic features **8500/3** Invasive carcinoma NST/duct with medullary features **8500/3** Invasive carcinoma, with signet-ring cell features **8500/3** Invasive carcinoma of no special type (NST) **8500/3** Invasive carcinoma with clear cell (glycogen rich) features **8500/3**	

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How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables

Breast

Specific and NOS/NST Terms and Code	Synonyms	Subtypes/Variants
	Invasive carcinoma, NST **8500/3** Invasive carcinoma, type cannot be determined **8500/3** Invasive mammary carcinoma **8500/3** Invasive mammary carcinoma associated with encysted papillary carcinoma **8500/3** Invasive mammary carcinoma NST with lobular features **8500/3** Invasive mammary carcinoma NST with medullary features **8500/3** Invasive mammary carcinoma NST with mucinous features **8500/3** Invasive mammary carcinoma NST with tubulo-lobular variant **8500/3** Invasive mammary carcinoma with apocrine features **8500/3** Invasive mammary carcinoma with cribriform features **8500/3** Invasive mammary carcinoma with tubular features **8500/3** Mammary carcinoma in situ **8500/2** Mammary carcinoma/cancer Non-invasive mammary carcinoma **8500/2**	
Glycogen-rich clear cell carcinoma 8315	Glycogen-rich carcinoma	Clear cell carcinoma **8310**
Inflammatory carcinoma 8530		
Lipid-rich carcinoma 8314	Lipid-secreting carcinoma	

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How to Use the Tables

Using the Specific Histologies, NOS, and Subtypes/Variants Tables
Breast

Specific and NOS/NST Terms and Code	Synonyms	Subtypes/Variants
Lobular carcinoma 8520	Alveolar lobular carcinoma Classic lobular carcinoma Intraductal papilloma with lobular carcinoma in situ **8520/2** Invasive lobular carcinoma, alveolar type/variant **8520/3** Invasive lobular carcinoma, solid type **8520/3** Lobular carcinoma in situ **8520/2** Lobular carcinoma with cribriform features Mixed lobular carcinoma (lobular carcinoma NOS and one or more variants of lobular carcinoma) Invasive pleomorphic lobular carcinoma **8520/3** Solid lobular carcinoma Tubulolobular carcinoma	Pleomorphic lobular carcinoma in situ **8519/2*** *Note:* 8519/2 is a new code for in situ /2 tumors only.
Medullary carcinoma 8510	MC	Atypical medullary carcinoma (AMC) **8513**

Table continues on next page

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How to Use the Tables

Using the Combination Histologies and Code Tables
Lung

Required Terms	Combination Histologies and Code
Adenocarcinoma NOS **AND** Squamous cell carcinoma NOS *Note*: Diagnosis **must be** adenocarcinoma NOS and squamous cell carcinoma NOS, **NOT** any of the **subtypes/variants** of adenocarcinoma or squamous cell carcinoma	Adenosquamous carcinoma **8560**
Giant cell carcinoma **AND** Spindle cell carcinoma *Note:* Sarcomatoid carcinoma is not in the histology table because sarcomatoid tumors primarily originate in the mediastinum. The combination code is added for the rare occasion when a tumor occurs within the lung.	Sarcomatoid carcinoma **8033** *Note:* Both giant cell carcinoma and spindle cell carcinoma are components of sarcomatoid carcinoma. The most accurate code for a combination of giant cell and spindle cell carcinoma is sarcomatoid carcinoma
Epithelial carcinoma **AND** Myoepithelial carcinoma	Epithelial-myoepithelial carcinoma **8562**
Mucinous carcinoma, invasive **AND** Non-mucinous carcinoma, invasive	Mixed invasive mucinous and non-mucinous carcinoma **8254/3***

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How to Use the Tables

Using the Combination Histologies and Code Tables
Lung

Required Terms	Combination Histologies and Code
Small cell carcinoma/neuroendocrine tumor (NET) *Note:* **Includes subtypes/variants** of small cell/neuroendocrine tumor. See Table 3 for subtypes/variants. **AND** **At least one** of the following: • Adenocarcinoma and any subtype/variant of adenocarcinoma • Adenosquamous carcinoma • Large cell carcinoma and any subtype/variant of large cell carcinoma • Squamous cell carcinoma and any subtype/variant of squamous cell carcinoma • Non-small cell carcinoma	Combined small cell carcinoma **8045**
Squamous cell carcinoma (epidermoid carcinoma) **AND** Large cell non-keratinizing squamous cell carcinoma *Note:* Squamous cell carcinoma and epidermoid carcinoma are synonyms	Squamous cell carcinoma, large cell, nonkeratinizing **8072**
Squamous cell carcinoma (epidermoid carcinoma) **AND** Small cell nonkeratinizing squamous cell carcinoma *Note:* Squamous cell carcinoma and epidermoid carcinoma are synonyms	Squamous cell carcinoma, small cell, nonkeratinizing **8073**

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How to Use the Tables

Using the Combination Histologies and Code Tables
Lung

Required Terms	Combination Histologies and Code
Diagnosis must be a single tumor which meets one of the following two criteria: 1. At least two of the subtypes/variants of adenocarcinoma **AND** percentages of each type are unknown/not stated • Acinar adenocarcinoma • Clear cell adenocarcinoma • Lepidic adenocarcinoma *Note:* Lepidic adenocarcinoma may or may not have mucinous components. • Micropapillary adenocarcinoma • Papillary adenocarcinoma • Solid adenocarcinoma • Well-differentiated fetal adenocarcinoma *Note:* This includes a diagnosis of adenocarcinoma **AND** at least two subtypes/variants of adenocarcinoma. 2. A combination of histologies **not listed on previous rows** of this table.	Adenocarcinoma with mixed subtypes **8255/3** *Note 1:* 8255 is a "last resort" code. *Note 2:* See the **Histology Rules** to determine when it is appropriate to use this code for combination histologies other than adenocarcinoma subtypes/variants. *Note 3:* 8255 does not apply to squamous cell carcinoma, NOS and/or subtype/variants of SCC.

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How to Use the Tables

Using the Combination Histologies and Code Tables
Breast

Required Histology Terms	Histology Combination Term and Code
DCIS/duct carcinoma/carcinoma NST **8500** **AND** Lobular carcinoma **8520** *Note 1:* Both histologies, duct and lobular, **must have** the **same behavior** code. *Note 2:* **8522** is used when: • Duct **AND** lobular carcinoma are present in a **single tumor OR** • Duct is present in at least one tumor and lobular is present in at least one tumor in the same breast **OR** • One tumor is mixed duct and lobular; the other tumor in the same breast is either duct or lobular **OR** • All tumors in the same breast are mixed duct and lobular *Example*: One tumor with invasive duct CA in LOQ RT breast; second tumor with invasive lobular in UOQ RT breast *Note 3:* **Do not** use 8522 when the diagnosis is carcinoma NST/duct carcinoma with lobular **differentiation**. See Histology Rules for instructions on **coding differentiation.**	**Invasive** carcinoma NST/duct carcinoma **and invasive** lobular carcinoma **8522/3** *Note 1:* CAP uses the term Invasive carcinoma with ductal and lobular features ("mixed type carcinoma") *Note 2:* Carcinoma NST includes all subtypes/variants of carcinoma NST. DCIS **and in situ** lobular carcinoma **8522/2** *Note:* The lobular carcinoma includes pleomorphic lobular carcinoma in situ **8519/2.**
DCIS/duct carcinoma/carcinoma NST **OR** any ONE subtype/variant of carcinoma NST **AND** **Any** histology in **Table 3 with exception** of • Lobular carcinoma **8520** and pleomorphic lobular carcinoma in situ **8519/2*** • Paget disease **8540** *Note 1:* Both histologies **must have** the **same behavior** code. *Note 2:* See Table 3 for carcinoma NST/duct carcinoma subtypes/variants. *Note 3:* **Do not** use combination code for duct with lobular **differentiation.** This is a synonym for carcinoma NST.	Invasive carcinoma NST/duct mixed with other types of invasive carcinoma **8523/3** DCIS mixed with other in situ carcinoma **8500/2** *Note:* Prior to 2018, DCIS and other in situ was coded **8523/2.**

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How to Use the Tables

Using the Combination Histologies and Code Tables
Breast

Required Histology Terms	Histology Combination Term and Code
Lobular carcinoma **AND** **Any** histology in **Table 3 with exception** of • Duct carcinoma/carcinoma NST/DCIS (and subtypes/variants) **8500** • Paget disease, in situ and invasive *Note 1:* See Table 3 for carcinoma NST/duct carcinoma subtypes/variants. *Note 2:* This code does not include lobular and Paget disease. See Multiple Primary Rules. Lobular carcinoma and Paget are separate primaries.	Infiltrating lobular mixed with other types of carcinoma **8524/3** In situ lobular mixed with other types of in situ carcinoma **8524/2**
Paget disease **AND** **Underlying** DCIS *Note:* Paget disease is classified as malignant /3 in the ICD-O. Paget disease is coded as in situ /2 **ONLY** when the pathology states the Paget disease is in situ.	Paget disease (invasive or behavior not specified) and DCIS/intraductal carcinoma **8543/3** **Paget disease** (specified as in situ) and DCIS/intraductal carcinoma **8543/2**
Paget disease **AND** **Underlying** infiltrating **duct** carcinoma/carcinoma NST and **all subtypes/variants** of infiltrating duct/carcinoma NST (must be a /3) *Note:* See Table 3 for subtypes/variants of carcinoma NST/duct carcinoma.	Paget disease and infiltrating duct carcinoma **8541/3**
Any two invasive carcinoma NST subtypes/variants (percentage not stated) abstracted as a single primary *Note 1:* The diagnosis may be two subtypes/variants and the pathologist may mention the presence of duct/carcinoma NST. Ignore the mention of carcinoma NST. *Note 2:* See Table 3 for subtypes/variants of carcinoma NST/duct carcinoma.	Adenocarcinoma with mixed subtypes **8255/3**

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A Few Important Highlights

Breast

NST (No Special Type), mammary carcinoma NST, and carcinoma NST are the new terms for duct or ductal carcinoma. Previously, it was thought that carcinoma originated in the ducts or lobules of the breast, hence the names duct carcinoma and lobular carcinoma. Current thinking is that carcinoma originates in the "terminal duct lobular unit" therefore the preferred term is NST or carcinoma NST.

Mammary carcinoma is a synonym for carcinoma no special type (NST)/duct carcinoma not otherwise specified (NOS) **8500.** It will **no longer** be coded as carcinoma NOS **8010.**

DCIS/Carcinoma NST in situ has a major classification change.

A. Subtypes/variant, architecture, pattern, and features **ARE NOT CODED**. The majority of in situ tumors will be coded to DCIS **8500/2.**
B. It is very important to code the grade of all DCIS.
   i. Code grade as designated in current AJCC Manual, SEER Coding Manual, and COC Coding Manual.
   ii. The current breast **WHO** edition emphasizes coding the **grade** of tumor rather than the **subtype/variant**.
   iii. The WHO editions are used internationally by pathologists to keep their nomenclature and histology identification current.
   iv. Over time, **subtypes/variants** will be diagnosed **less frequently.**

The invasive subtype/variant is coded **ONLY** when it comprises **greater than 90%** of the tumor. This change has been implemented in both the WHO and in the CAP protocols.

New codes/terms are identified by asterisks (*) in the histology table in the Terms and Definitions.

Excerpt from the CAP Invasive Breast Protocol (page 17): "A modified list is presented in the protocol based on the most frequent types of invasive carcinomas and terminology that is in widespread usage. The modified list is intended to capture the majority of tumors and reduce the classification of tumors being reported as 'other.' The WHO classification is presented for completeness".

A Few Important Highlights

Colon/Rectum/Rectosigmoid

2007 Rules instruct "Code the histology from the most representative specimen." For all sites except breast and CNS, 2018 Rules instruct "Code the most specific histology from biopsy or resection. When there is a discrepancy between the biopsy and resection (two distinctly different histologies/different rows), code the histology from the most representative specimen (the greater amount of tumor)."

Rectum and **Rectosigmoid** are now included with the Colon Rules. In the 2007 MPH Rules, they were included with Other Sites.

There are new multiple primary rules which address **anastomotic recurrence.**

Neuroendocrine tumors (formerly carcinoid) arising in the appendix are reportable for cases diagnosed 1/1/2015 and forward.

Rule clarification: Pseudomyxoma peritonei (accumulation of mucin-secreting tumor cells in the abdominal or pelvic cavity) now has a **two-tiered system** (WHO 2010) that classifies pseudomyxoma peritonei as either **high-grade** or **low-grade** (see below). Pseudomyxoma peritonei is usually associated with **mucinous** tumors of the appendix and is rarely associated with ovarian mucinous tumors.

- **High**-grade pseudomyxoma peritonei is **malignant** /3
- **Low**-grade pseudomyxoma peritonei is **not malignant** /1
- See **Histology Rules** for **coding instructions**

There are **dysplasias** which have been assigned an **in situ behavior** code /2 in **WHO** and in **the ICD-O Update**. Despite becoming a /2, they are **not reportable in the US**. They are reportable in Canada.

- Dysplasia **was not** collected in the past. If dysplasia is added to the database with the same code as in situ tumors, there will be a **huge upsurge** in the **incidence** of in situ neoplasms. The various agencies are looking for solutions to this issue.
- There would be no way to **separate** the dysplasias from the in-situ neoplasms in the database, which would cause problems with surveillance (long-term studies) since the prognosis and probabilities of disease progression are different between an in-situ tumor and a dysplasia
- **Pathologists frequently use the term "severe dysplasia" or "high grade dysplasia" in place of carcinoma in situ. Code CIS only** if the pathologist expressly states "CIS"

Polyps are now **disregarded** when coding histology. For example, adenocarcinoma in an adenomatous polyp is coded as adenocarcinoma 8140. For the purposes of determining multiple primaries, tumors coded as adenocarcinoma in a polyp for pre-2018 cases should be treated as adenocarcinoma 8140.

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A Few Important Highlights

Head and Neck

2007 Rules instruct "Code the histology from the most representative specimen." For all sites except breast and CNS, 2018 Rules instruct "Code the most specific histology from biopsy or resection. When there is a discrepancy between the biopsy and resection (two distinctly different histologies/different rows), code the histology from the most representative specimen (the greater amount of tumor)."

Two bone sites, mandible C410 and maxilla C411, have been added to the Head and Neck Rules.

External ear C442 has been added to the Head and Neck Rules. Basal cell carcinoma, squamous cell carcinoma, and all non-reportable neoplasms are excluded.

Autonomic nervous system C479 has been added as a primary site for those paragangliomas reported as malignant.

Carotid body paraganglioma 8690 *Note 1:* This neoplasm is only reportable when documented as malignant/invasive /3 behavior. *Note 2:* Cases diagnosed as malignant in 2018 should be reported as 8690/3. The proposed new code, 8692/3, cannot be used because it has not been implemented.	Carotid body tumor Chemodectoma, carotid Non-chromaffin paraganglioma, carotid
Laryngeal paraganglioma 8690 *Note 1:* This neoplasm is only reportable when documented as malignant/invasive /3 behavior. *Note 2:* Cases diagnosed as malignant in 2018 should be reported as 8690/3. The proposed new code, 8693/3, cannot be used because it has not been implemented. *Note 3:* Vagal paraganglioma has the same proposed histology code as laryngeal paraganglioma. Laryngeal and vagal are in separate rows to emphasize the primary site.	Chemodectoma, laryngeal Non-chromaffin paraganglioma, laryngeal
Middle ear paraganglioma 8690 *Note 1:* This neoplasm is only reportable when documented as malignant/invasive /3 behavior. *Note 2:* Cases diagnosed as malignant in 2018 should be reported as 8690/3.	Glomus jugulare tumor of middle ear Glomus tympanicum Jugulotympanic chemodectoma
Vagal paraganglioma 8690 *Note 1:* This neoplasm is only reportable when documented as malignant/invasive /3 behavior. *Note 2:* Cases diagnosed as malignant in 2018 should be reported as 8690/3. The proposed new code, 8693/3, cannot be used because it has not been implemented. *Note 3:* Vagal paraganglioma has the same proposed histology code as laryngeal paraganglioma. Laryngeal and vagal are in separate rows to emphasize the primary site.	Glomus jugulare tumor of vagal trunk Chemodectoma of vagal trunk Non-chromaffin paraganglioma of vagal trunk

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A Few Important Highlights

Lung

Changes are **implemented slowly** over time, so it is not unusual for a pathology report to use an obsolete term. **Obsolete** terms and codes **can be used** when they are the **only information** available.
WHO 4th Ed Tumors of Lung 2015 has a new classification of adenocarcinoma which is a significant change from the 2004 WHO classification. One of the major changes is discontinuing usage of the term **bronchioloalveolar carcinoma (BAC)** beginning with cases diagnosed 1/1/2018 and forward. The preferred term for BAC is now mucinous adenocarcinoma **8253**.

The following new adenocarcinoma terms and codes have been added. The new terms and codes are **for lung only**. See notes in Table 3.

A. Mucinous carcinoma/adenocarcinoma
- **8253/3** when
  - Behavior unknown/not documented (use staging form to determine behavior when available)
  - Invasive
- **8257/3** when
  - Microinvasive
  - Minimally invasive
- **8253/2** when
  - Preinvasive
  - In situ

Note: Previously, only **invasive** /3 codes were available for mucinous adenocarcinoma of the lung. It has been recognized that not all lung cancers are invasive /3 so new codes were implemented.

B. Non-mucinous carcinoma/adenocarcinoma
- **8256/3** when
  - Microinvasive
  - Minimally invasive
- **8250/2** when
  - Preinvasive

C. Adenocarcinomas (CAP Terminology)
Adenocarcinoma, acinar predominant 8551
- Adenocarcinoma, lepidic predominant 8250
- Adenocarcinoma, micropapillary predominant 8265
- Adenocarcinoma, papillary predominant 8260
- Adenocarcinoma, solid predominant 8230

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A Few Important Highlights

Malignant Brain and CNS and Peripheral Nerves

2016 CNS WHO presents major restructuring of the diffuse gliomas, medulloblastomas and other embryonal tumors, and incorporates new entities that are defined by both histology and molecular features, including glioblastoma, IDH-wildtype and glioblastoma, IDH-mutant; diffuse midline glioma, H3 K27M-mutant, RELA fusion-positive ependymoma, medulloblastoma, WNT-activated and medulloblastoma, SHH-activated, and embryonal tumor with multilayered rosettes, C19MC-altered. The 2016 edition has added newly recognized neoplasms and has referred to some entities, variants and patterns as "not recommended" (previously called obsolete).

A. It has been determined that these "not recommended" terms no longer have diagnostic and/or biological relevance. For example, gliomatosis cerebri is a term which is no longer recommended. Gliomatosis cerebri is now termed a "growth pattern" rather than a histologic type.
B. Terms which are not recommended are not included in the tables. When one of these terms are used, refer to the ICD-O and all updates for the correct histology code. For example, glioma NOS is an umbrella term for all gliomas and astrocytomas. Glioma NOS is not recommended because diagnostic methodology is able to determine a more specific diagnosis.

Rule change: The 2007 rules said a glioblastoma multiforme (GBM) following an astrocytic or glial tumor was a single primary (recurrence). In the 2018 Solid Tumor Rules, GBM subsequent to an astrocytic or glial tumor is a multiple primary. GBM is now being collected as a new primary so it is possible to analyze the frequency with which these tumors recur in a more aggressive form (GBM).

Clarifications:

A. The following meningiomas are reportable: intraosseous, cavernous sinus and sphenoid wing.
B. Multiple cerebral meningiomas are a single primary.
C. Multiple brain tumors (same histology) are a single primary.
D. Laterality is not used to determine multiple primaries.
E. Timing is not used to determine multiple primaries.
F. The brain (C710-C719) is a single primary site.
G. Neurofibromatosis NOS, Neurofibromatosis 1 (NF1), Neurofibromatosis 2 (NF2), and schwannomatosis are genetic syndromes and not reportable neoplasms. People with this genetic syndrome do have a high risk of developing:
   i. Non-reportable non-malignant tumors occurring in skin and sites other than CNS AND
   ii. Reportable malignant tumors

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A Few Important Highlights

Non-Malignant Brain and CNS Tumors

Clarifications:

- The following meningiomas are reportable: **Intraosseous**, **cavernous sinus,** and **sphenoid wing.**
- Multiple cerebral meningiomas (same histology or NOS and subtype/variant) are a single primary.
- Multiple brain tumors (same histology) are a single primary.
- Bilateral optic nerve gliomas/pilocytic astrocytomas are a single primary.
- Laterality is not used to determine multiple primaries.
- Timing is not used to determine multiple primaries.
- The brain C710-C719 is a single primary site.
- Neurofibromatosis NOS, Neurofibromatosis 1 (NF1), Neurofibromatosis 2 (NF2), and schwannomatosis are familial tumor syndromes and are not reportable conditions. People with NF1 and NF2 have a high risk of developing reportable and non-reportable tumors. Tumors associated with NF1 and NF2 are reportable when they meet the behavior (/0 or /1), site (within the CNS), and histology reportability requirements (see Reportability Criteria).

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New Radiation Tools and Techniques for Cancer Treatment

FCDS Annual Conference

8/1/2019

Orlando, Florida

Steven Peace, CTR

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Introduction

- Radiation therapy uses high-energy particles or waves, such as x-rays, gamma rays, electron beams, or protons, to destroy or damage cancer cells.
- Your cells normally grow and divide to form new cells. But cancer cells grow and divide faster than most normal cells. Radiation works by making small breaks in the DNA inside cells. These breaks keep cancer cells from growing and dividing and cause them to die. Nearby normal cells can also be affected by radiation, but most recover and go back to working the way they should.
- Unlike chemotherapy, which usually exposes the whole body to cancer-fighting drugs, radiation therapy is usually a local treatment. In most cases, it's aimed at and affects only the part of the body being treated. Radiation treatment is planned to damage cancer cells, with as little harm as possible to nearby healthy cells.
- Some radiation treatments (systemic radiation therapy) use radioactive substances that are given in a vein or by mouth. Even though this type of radiation does travel throughout the body, the radioactive substance mostly collects in the area of the tumor, so there's little effect on the rest of the body.

https://www.cancer.org/treatments/radiation/basics.html

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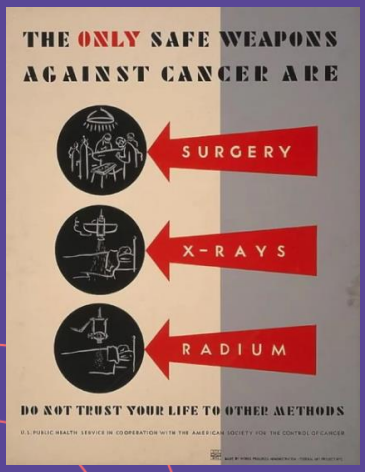
Brief History of Radiation Therapy



1895 – X-rays discovered - Roentgen
1898 – X-rays used to treat breast cancer
1898 – Radium rays discovered – Curie's
1901 – Roentgen won Nobel Prize in Physics
1910 – High energy x-rays treating deep cancers
1920 – Radioactive isotopes, new rays, new techniques
1920 – Fractionated Dose instead of Single Dose
1930-1950 – Orthovoltage Era & interstitial radiation
1950-1980 – Megavoltage Era – Cobalt therapy, linear accelerators
1970-1980 – Proton Beam devices
1990 – 3D Conformal/Stereotactic radiation therapy devices
2000 – Adaptive radiation therapy – image guided therapies

Global Dermatology https://doi.org/10.3889/oamjms.2017.122

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Radiation Therapy Delivery - Techniques

- External Beam Radiation Therapy
- Internal Radiation Therapy or Brachytherapy
- Systemic Radiation Therapy or Total Body Radiation Therapy
- Types of Radiation Therapy Devices
- Radiation Dose, Volume, Number of Treatments, and Fractionation

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Radiation Therapy Delivery – CoC Techniques

- External Beam, NOS
- Low Energy X-Ray/Photon Therapy
- 2-D Therapy
- 3-D Conformal Therapy
- Intensity Modulated Therapy
- Stereotactic Radiotherapy/Radiosurgery - NOS
- Stereotactic Radiotherapy/Radiosurgery – Robotic
- Stereotactic Radiotherapy/Radiosurgery – Gamma Knife
- CT-Guided Online Adaptive Therapy
- MR-Guided Online Adaptive Therapy

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External Beam Radiation Therapy

- Conventional external beam radiation therapy (2DXRT)
- Three-dimensional conformal radiation therapy (3D-CRT)
- Image guided radiation therapy (IGRT)
- Intensity modulated radiation therapy (IMRT)
- Helical-tomotherapy
- Photon beam radiation therapy
- Proton beam radiation therapy
- Stereotactic radiosurgery
- Intraoperative radiation therapy (IORT)
- Stereotactic body radiation therapy (SBRT)
- Volumetric modulated arc therapy (VMAT)
- High Definition Radiotherapy (HDRT) & High Definition Radiosurgery (HDRS)

https://www.cancer.org/treatments/radiation/basics.html

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Internal Radiation Therapy - Brachytherapy

- Internal radiation therapy (brachytherapy) allows a higher dose of radiation in a smaller area than might be possible with external radiation treatment.
- It uses a radiation source that's usually sealed in a small holder called an implant. Different types of implants may be called pellets, seeds, ribbons, wires, needles, capsules, balloons, or tubes.
- No matter which type of implant is used, it is placed in your body, very close to or inside the tumor. This way the radiation harms as few normal cells as possible.
- During intracavitary radiation, the radioactive source is placed in a body cavity (space) , such as the rectum or uterus.
- With interstitial radiation, the implants are placed in or near the tumor, but not in a body cavity.

https://www.cancer.org/treatments/radiation/basics.html

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High Dose or Low Dose Brachytherapy?

- High-dose-rate (HDR) brachytherapy allows a person to be treated for only a few minutes at a time with a powerful radioactive source that's put in the applicator.
- The source is removed after several minutes. This may be repeated over the course of a few days to weeks. The radioactive material is not left in your body. The applicator might be left in place between treatments, or it might be put in before each treatment.
- Low-dose-rate (LDR) brachytherapy allows the implant to give off lower doses of radiation over a longer period.
- Some implants are left in from 1 to a few days and then removed. You'll probably have to stay in the hospital, sometimes in a special room, during treatment. For larger implants, you might have to stay in bed and lie still to keep it from moving.
- Some smaller implants (such as the seeds or pellets) are left in place – they're never taken out. Over the course of several weeks they stop giving off radiation. The seeds are about the size of rice grains and rarely cause problems. If your implants are to be left in, you may be able to go home the same day they're put in.

https://www.cancer.org/treatments/radiation/basics.html

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Systemic Radiation Therapy - Radioisotopes

- Certain cancers, such as thyroid, bone, and prostate are treated with radiopharmaceuticals (radioactive drugs) . A radiopharmaceutical is a liquid drug made up of a radioactive substance. It is sometimes bound to a special antibody (called a monoclonal antibody) that attaches to the cancer cells. Examples of radiopharmaceuticals used for systemic radiation include radioactive iodine, strontium, samarium, and radium.

- These drugs may be given in a vein (IV) or taken by mouth. They travel in the blood throughout the body. The antibody makes them attach to the cancer cells. They then give off their radiation and kill the cancer cells.

- Radioisotopes – I-131, Strontium-90, Strontium-89, Radium-223

- Radioimmunotherapy

https://www.cancer.org/treatments/radiation/basics.html

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Types of Radiation Therapy Devices

- Most are referred to by who makes the machine/device
  - Varian
  - Siemans
  - Elekta
  - Accuray
  - C.R. Bard
  - IBA Worldwide
- CT Simulators for Treatment Planning
- Linear Accelerator or 'linac' for External Beam Radiation
- Stereotactic Delivery - Gamma Knife, X-Knife, CyberKnife, Clinac
- Implants (Brachytherapy)
  - Radioactive seeds - implants
  - MammoSite – catheter
  - Savi Breast Brachytherapy - catheter
  - High Dose Remote Afterloader – catheter
  - TheraSphere – radio embolization – glass beads via catheter

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Radiation Therapy Delivery – Modality

Code	Label
00	No radiation treatment
01	External beam, NOS
02	External beam, photons
03	External beam, protons
04	External beam, electrons
05	External beam, neutrons
06	External beam, carbon ions
07	Brachytherapy, NOS
08	Brachytherapy, intracavitary, LDR
09	Brachytherapy, intracavitary, HDR
10	Brachytherapy, Interstitial, LDR
11	Brachytherapy, Interstitial, HDR
12	Brachytherapy, electronic
13	Radioisotopes, NOS
14	Radioisotopes, Radium-223
15	Radioisotopes, Strontium-89
16	Radioisotopes, Strontium-90
99	Radiation treatment modality unknown; Unknown if radiation treatment administered

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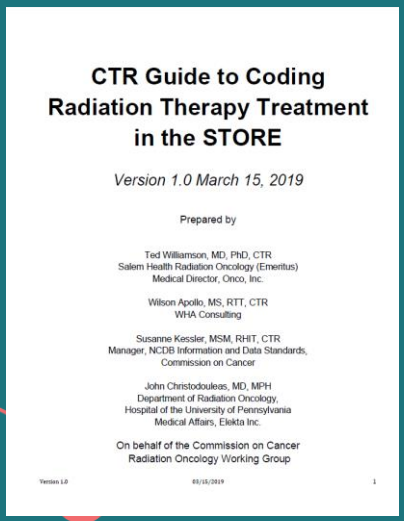
Case Studies for Coding Radiation Therapy



CTR Guide to Coding Radiation Therapy Treatment in the STORE

Version 1.0 March 15, 2019

Prepared by

Ted Williamson, MD, PhD, CTR
Salem Health Radiation Oncology (Emeritus)
Medical Director, Onco, Inc.

Wilson Apollo, MS, RTT, CTR
WHA Consulting

Susanne Kessler, MSM, RHIT, CTR
Manager, NCDB Information and Data Standards,
Commission on Cancer

John Christodouleas, MD, MPH
Department of Radiation Oncology,
Hospital of the University of Pennsylvania
Medical Affairs, Elekta Inc.

On behalf of the Commission on Cancer
Radiation Oncology Working Group

Version 1.0 03/15/2019 1

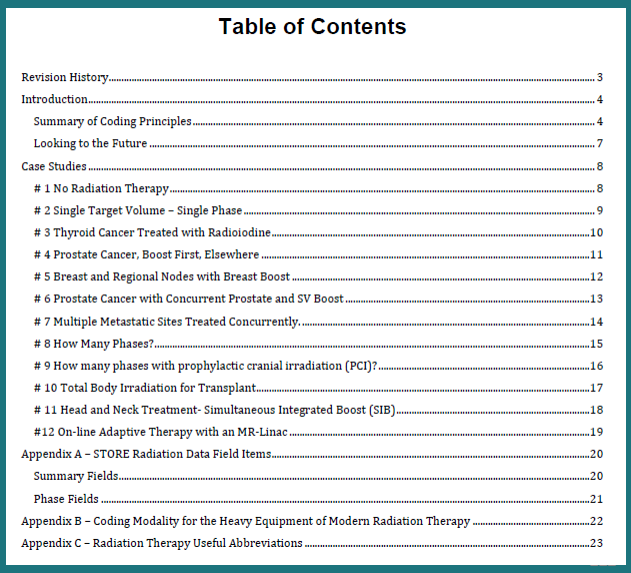


Table of Contents

2018 - 2019
WHAT'S NEW IN CANCER CARE?
ADVANCES IN DIAGNOSIS AND TREATMENT

FCDS ANNUAL CONFERENCE

ORLANDO, FLORIDA

8/1/2019

STEVEN PEACE, CTR

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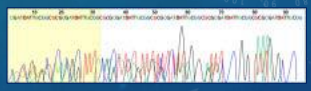
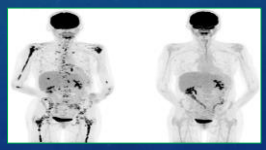
PRESENTATION OUTLINE

- Introduction
- 2019 Incidence & Mortality Estimates
- AACR Cancer Progress Report 2018
- FDA Novel Drug Approvals in 2018
- ASCO 2019 Clinical Cancer Advances
- NCCN Annual Report 2018
- 2019 Annual Report to the Nation on the Status of Cancer
- Update on National Cancer Moonshot Initiative
- NCI Match Trial - Mutations and Agents
- Molecular Testing for Solid Tumors 2019
- Questions





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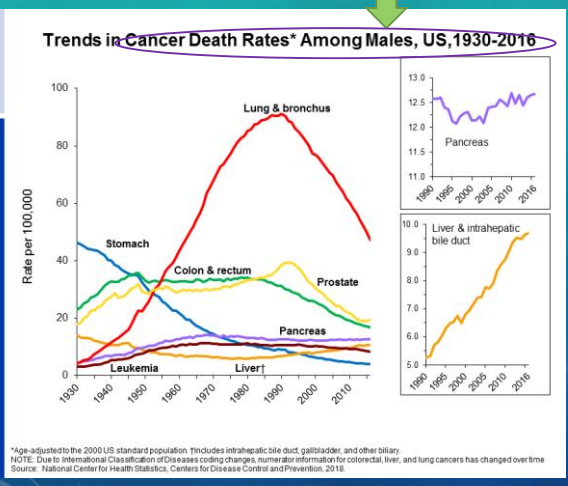
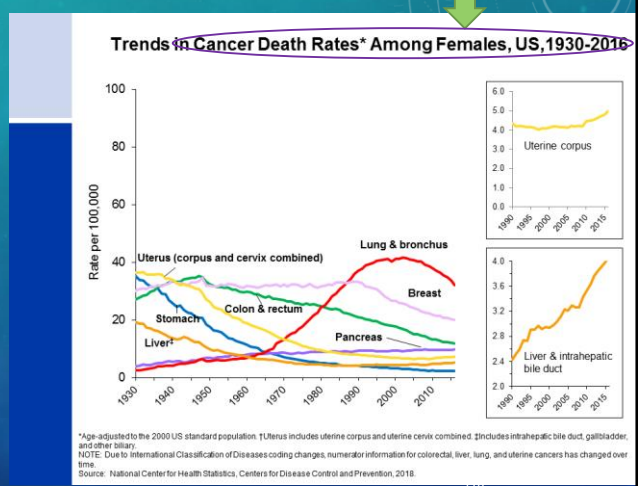
INTRODUCTION

- In 2018, the US Food and Drug Administration (FDA) approved a record 59 new drugs across all medical specialties; of these, 17 (29%) approvals were relevant to oncology/hematology specifically.
- This represents an increase from 2017, in which the FDA approved 12 new oncology/hematology agents.
- 8 of the 17 oncology/hematology approvals in 2018 are indicated for the treatment of various blood cancers.
- Breast - the risk of invasive recurrence of human epidermal growth factor receptor 2–positive, early-stage breast cancer was 50% lower in patients treated with ado-trastuzumab emtansine compared with those who received trastuzumab alone. This finding supports the use of ado-trastuzumab emtansine as a new standard of care in these patients.
- Two CLL [chronic lymphocytic leukemia] studies established ibrutinib as the standard of care for front-line treatment of CLL in the younger and older populations, respectively.
- Adenocarcinoma of Lung - Paz-Ares et al found that adding pembrolizumab to chemotherapy (pemetrexed and carboplatin) nearly doubled the objective response rate (ORR) in patients and is in tolerable safety profile.
- Lung – Target Therapy - New EGFR inhibitor delays lung cancer progression in drug resistant mutations of EGFR – osimertinib (Tagrisso)
- Prostate - two new agents for treatment of high-risk, non-metastatic, castration-resistant prostate cancer was particularly important. Apalutamide and enzalutamide approved by the FDA based on findings of SPARTAN and PROSPER trials.
- Immunotherapy - Nobel Prize in Physiology or Medicine awarded to James P. Allison of United States and Tasuku Honjo of Japan for work on cancer immunotherapy. Their findings on checkpoint inhibitors "brought immunotherapy out from decades of skepticism."
- Combination Immunotherapy - Combination of two immunotherapy agents, nivolumab and ipilimumab in patients with intermediate or high-risk RCC improved 18-month overall survival compared with tyrosine kinase inhibitor sunitinib (Sutent), 75% for the combination *v* 60% for sunitinib. And, 9% of patients receiving nivolumab with ipilimumab had complete regression of the cancer.
- Radiation Therapy - SBRT [stereotactic body radiation therapy] for the treatment of oligometastatic disease (small number of mets)

http://www.cancernetwork.com/oncology-journal/key-advances-oncology-2018

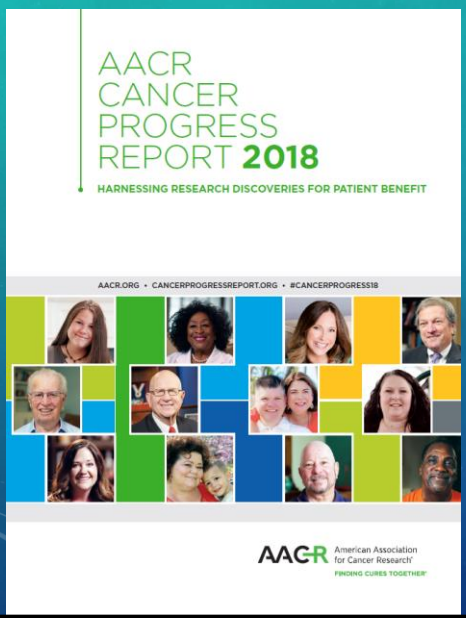
2019 INCIDENCE & MORTALITY ESTIMATES

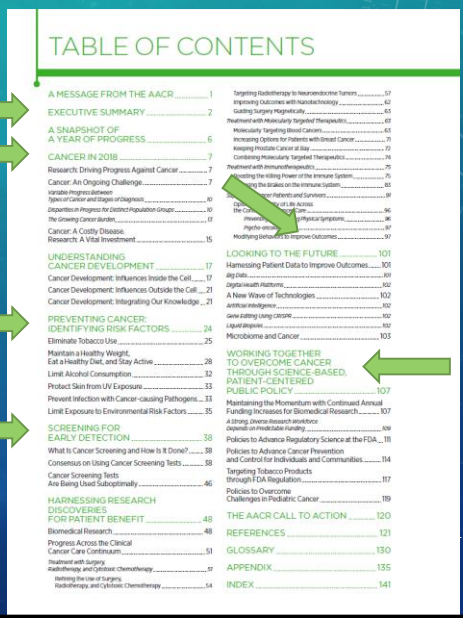




2018 Cancer Facts and Figures – American Cancer Society

AACR CANCER PROGRESS REPORT 2018

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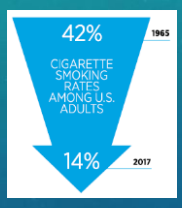

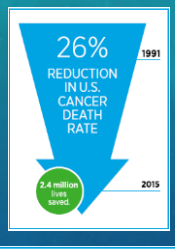

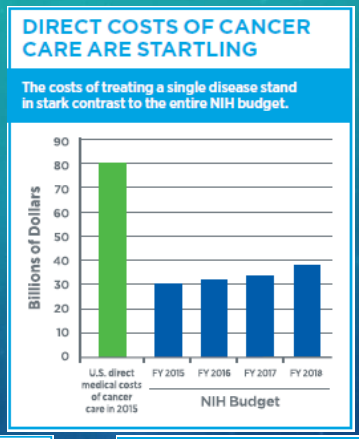

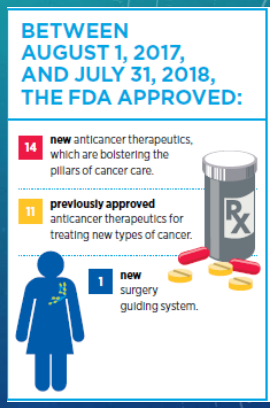

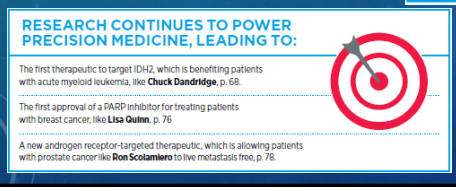

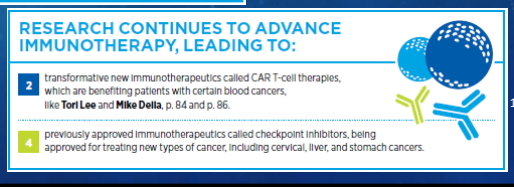

FDA NOVEL DRUG APPROVALS FOR 2018

Drug Name	Active Ingredient	FDA-Approved Use
Elzonris	Tagraxofusp-erzs	Blastic Plasmacytoid Dendritic Cell Neoplasm (BPDC)
Asparlas	Calaspargase pegol-mknl	acute lymphoblastic leukemia (ALL) in pediatric and adult patients age 1 month to 21 years
Xospata	gilteritinib	Relapsed or refractory acute myeloid leukemia (AML)
Daurismo	glasdegib	Newly-diagnosed acute myeloid leukemia (AML)
Gamifant	emapalumab-lzsg	hemophagocytic lymphohistiocytosis (HLH)
Lorbrena	lorlatinib	anapalastic lymphoma kinase (ALK)-positive metastatic non-small cell lung cancer
Talzenna	talazoparib	locally advanced or metastatic breast cancer with germline BRCA mutation
Vizimpro	dacomitinib	metastatic non-small-cell lung cancer
Libtayo	cemiplimab-rwlc	cutaneous squamous cell carcinoma (CSCC)
Copiktra	duvelisib	relapsed or refractory chronic lymphocytic leukemia, lymphocitic lymphoma, follicular lymphoma
Lumoxiti	moxetumomab pasudotox-tdfk	hairy cell leukemia
Poteligeo	mogamulizumab-kpkc	two rare types of non-Hodgkin lymphoma
Tibsovo	ivosidenib	relapsed or refractor acute myeloid leukemia (AML)
Braftovi	encorafenib	unresectable or metastatic melanoma
Mektovi	binimetinib	unresectable or metastatic melanoma
Erleada	apalutamide	prostate cancer
Lutathera	lutetium Lu 177 dotatate	pancreatic and gastrointestinal tract gastroenteropancreatic neuroendocrine tumors (NETs)

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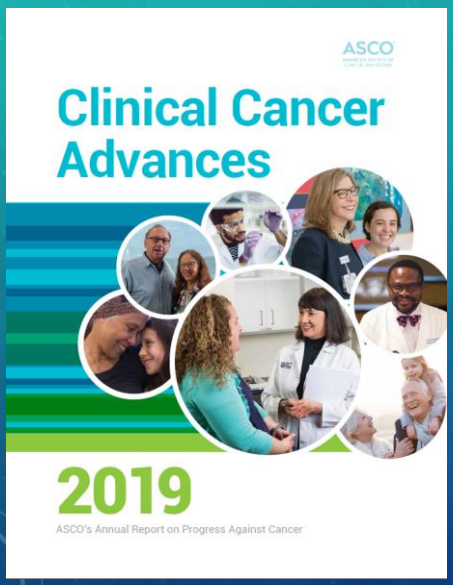
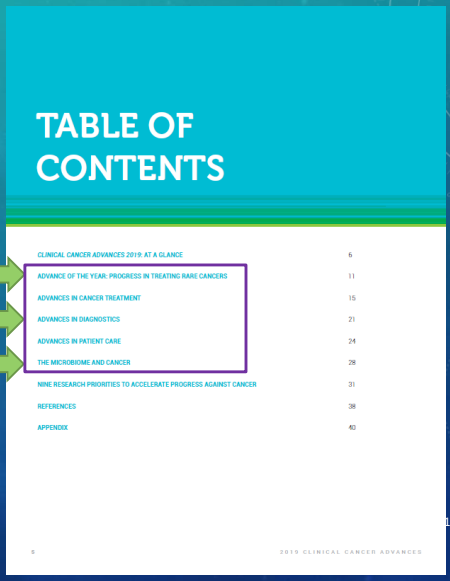
2018 New Approvals Report (/downloads/Drugs/DevelopmentApprovalProcess/DrugInnovation/UCM629290.pdf)

ASCO 2019 CLINICAL CANCER ADVANCES





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ASCO 2019 CLINICAL CANCER ADVANCES

Advances in Cancer Treatment

Treatment advances across the spectrum of cancers have continued at a rapid pace. Lung cancer experienced significant treatment breakthroughs this year, primarily in immunotherapy, as it has in the past several years. Other immunotherapy trials brought new treatment options to patients with a range of solid tumor and blood cancers. In addition, in 2018, a Nobel Prize was awarded to the researchers who found that the immune system could be harnessed to attack cancer, highlighting the significance of research advances seen in this area.

Progress in treatment was also seen in systemic chemotherapy, targeted chemotherapy, surgery, and radiotherapy.

- Immunotherapy
  - Checkpoint Inhibitors
  - Combination Immunotherapy – melanoma, renal cell carcinoma
  - PD-1 Inhibitor for skin cancer
  - Pembrolizumab for H&N with high PD-L1
  - CAR-T therapy trials show longer term benefits
- Targeted Therapies
  - Tagrisso (EGFR Inhibitor) delays lung cancer progression
  - Verzenio (protein-targeted therapy) delays progression for CDK4/6 active advanced breast cancers
  - Vidaza and Dacogen for elderly patients with AML
- Other Therapeutic Approaches
  - Less is more for ovarian cancers – no 2nd look surgery
  - Xtandi or Erleada f+
  - or hormone resistant prostate cancer

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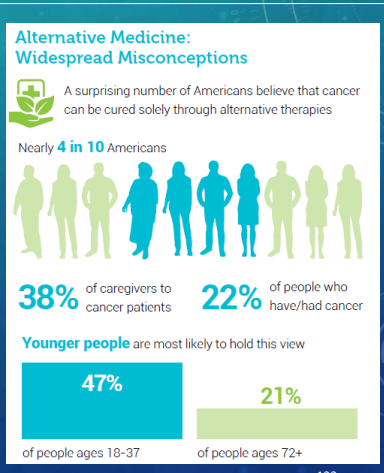
ASCO 2019 CLINICAL CANCER ADVANCES

Advances in Diagnostics

This year marked a major advance with a molecular test that can help many women with early-stage breast cancer safely forgo chemotherapy. There were also advances in the use of liquid biopsies for refining treatment in several major cancers.

- Advances in Liquid Biopsy for Early Detection using protein biomarkers and tumor-specific mutations in circulating DNA found in blood samples
- 21-gene expression assay identifies women who can safely skip adjuvant chemotherapy for HR+/HER2- breast cancer in women over age 50 with low and intermediate recurrence risk scores of 0-10 and 11-25 respectively

Not All is Good News



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Alternative Medicine Is Not a Substitute for Conventional Therapy

NCCN ANNUAL REPORT 2018

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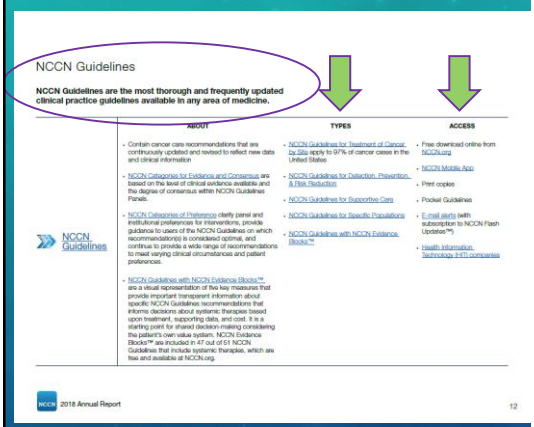
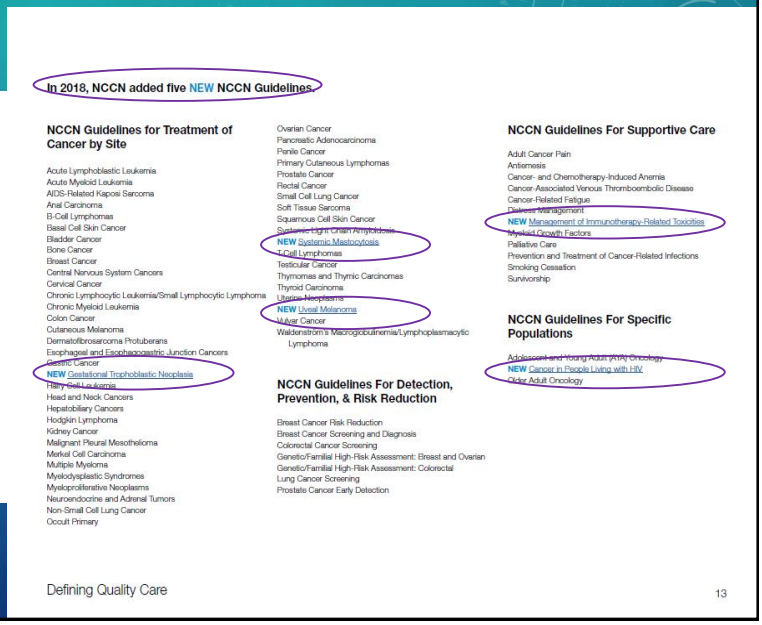
NCCN ANNUAL REPORT 2018





NCCN ANNUAL REPORT 2018

Clinical Resources

NCCN Drugs & Biologics Compendium (NCCN Compendium®)

- Contains authoritative, scientifically derived information designed to support decision-making about the appropriate use of drugs and biologics in patients with cancer
- Contains more than 3,200 active records
- Updated in conjunction with the NCCN Guidelines on a continual
- Recognized by public and private insurers as an authoritative refe coverage policy
- Subscription-based searchable database online at NCCN.org

NCCN Biomarkers Compendium®

- Contains information designed to support decision-making arour biomarkers in cancer care
- Provides essential details for tests recommended by the NCCN G as tests that measure changes in genes or gene products for pre monitoring, surveillance, or prognostic information
- Contains 1,200 records
- Subscription-based searchable database online at NCCN.org

NCCN Imaging Appropriate Use Criteria (NCCN Imaging AUC™)

- Details all imaging recommendations included in the NCCN Guid
- Available for more than 50 cancer types in addition to screening a
- NCCN is recognized by Centers for Medicare & Medicaid Services (CMS) as a qualified provider-led entity for creation of the NCCN Imaging AUC™
- Free searchable database online at NCCN.org
- NCCN Imaging AUC™ are available for commercial use through license of the NCCN

>10.1 million downloads in 2018
↑ 26% from 2017

Most Frequently Downloaded NCCN Guidelines in 2018

Breast Cancer	> 790,000 downloads
Non-Small Cell Lung Cancer	> 560,000 downloads
Colon Cancer	> 410,000 downloads

Largest Increase in NCCN Guidelines Downloads in 2018

Ovarian Cancer	60% increase
Neuroendocrine and Adrenal Tumors	60% increase
Esophageal and Esophagogastric Junction Cancers	47% increase

Clinical Resources (continued)

NCCN Radiation Therapy Compendium™

- Includes information designed to support clinical decision-making around the use of radiation therapy in patients with cancer
- Includes a full complement of radiation therapy recommendations found in the current NCCN Guidelines
- Contains 43 disease sites and 848 radiation therapy recommendations
- Subscription-based searchable database online at NCCN.org

NCCN Chemotherapy Order Templates (NCCN Templates®)

- Intended to improve the safe use of drugs and biologics in cancer care
- Includes chemotherapy, immunotherapy, supportive care agents, monitoring parameters, and safety instructions
- Special instructions for self-administered chemotherapeutic agents also provided
- Contains more than 1,330 active templates
- Downloaded ~500,000 times in 2018
- Subscription-based searchable database online at NCCN.org

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ANNUAL REPORT TO THE NATION ON STATUS OF CANCER

JNCI JOURNAL of the NATIONAL CANCER INSTITUTE

Annual Report to the Nation on the Status of Cancer, 1999–2015, Featuring Cancer in Men and Women ages 20–49 FREE

Elizabeth Ward, PhD ✉, Recinda L Sherman, PhD, MPH, CTR, S Jane Henley, MSPH, Ahmedin Jemal, DVM, PhD, David A Siegel, MD, MPH, Eric J Feuer, PhD, MS, Albert U Firth, BS, Betsy A Kohler, MPH, CTR, Susan Scott, MPH, Jiemin Ma, PhD, MHS ...
Show more

JNCI: Journal of the National Cancer Institute, djz106,
https://doi.org/10.1093/jnci/djz106
Published: 30 May 2019 **Article history** ▾

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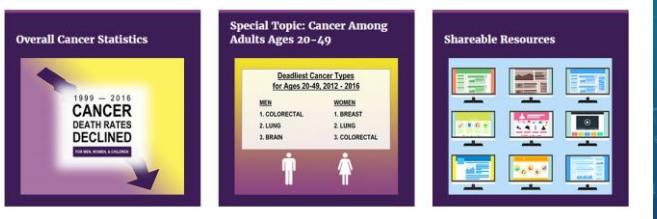
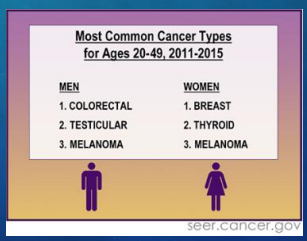
Abstract

Background

The American Cancer Society, Centers for Disease Control and Prevention, National Cancer Institute, and North American Association of Central Cancer Registries (NAACCR) provide annual updates on cancer occurrence and trends by cancer type, sex, race, ethnicity, and age in the US. This year's report highlights the cancer burden among men and women ages 20–49 years.

The Annual Report to the Nation on the Status of Cancer is an update of rates for new cases and deaths as well as trends for the most common cancers in the United States. This year's Special Section focuses on cancer trends among adults ages 20 to 49.





"Among people of all ages, overall cancer incidence (2011-2015) and death (2012-2016) rates were higher in men than in women, whereas among adults age 20-49 years, incidence and death rates were lower among men than women."

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MOLECULAR TESTING FOR SOLID TUMORS 2019

CA CANCER J CLIN 2019;69:305–343

The Current State of Molecular Testing in the Treatment of Patients With Solid Tumors, 2019

Wafik S. El-Deiry, MD, PhD, FACP[1]; Richard M. Goldberg, MD[2]; Heinz-Josef Lenz, MD, FAPC[3]; Anthony F. Shields, MD, PhD[4]; Geoffrey T. Gibney, MD[5]; Antoinette R. Tan, MD, MHSc[6]; Jubilee Brown, MD[7]; Burton Eisenberg, MD[8,9]; Elisabeth I. Heath, MD, FACP[10]; Surasak Phuphanich, MD[11]; Edward Kim, MD, FACP, FASCO[12]; Andrew J. Brenner, MD, PhD[13]; John L. Marshall, MD[14]

[1]Associate Dean for Oncologic Sciences, Warren Alpert Medical School; Director, Joint Program in Cancer Biology, Brown University and the Lifespan Cancer Institute; Professor of Pathology & Laboratory Medicine and Professor of Medical Science, Brown University, Providence, RI; [2]Professor of Medicine and Director, West Virginia University Cancer Institute, Morgantown, WV; [3]Professor of Medicine, Norris Comprehensive Cancer Center, University of Southern California, Los Angeles, CA; [4]Professor of Oncology, Karmanos Cancer Institute, Detroit, MI; [5]Associate Professor of Medicine, Co-Leader of the Melanoma Disease Group, Lombardi Comprehensive Cancer Institute, MedStar Georgetown Cancer Institute, Washington, DC; [6]Co-Director of Phase I Program, Department of Solid Tumor Oncology and Investigational Therapeutics, Levine Cancer Institute,

Abstract: The world of molecular profiling has undergone revolutionary changes over the last few years as knowledge, technology, and even standard clinical practice have evolved. Broad molecular profiling is now nearly essential for all patients with metastatic solid tumors. New agents have been approved based on molecular testing instead of tumor site of origin. Molecular profiling methodologies have likewise changed such that tests that were performed on patients a few years ago are no longer complete and possibly inaccurate today. As with all rapid change, medical providers can quickly fall behind or struggle to find up-to-date sources to ensure he or she provides optimum care. In this review, the authors provide the current state of the art for molecular profiling/precision medicine, practice standards, and a view into the future ahead. CA Cancer J Clin 2019;69:305-343. © 2019 The Authors. CA A Cancer Journal for Clinicians published by Wiley Periodicals, Inc. on behalf of American Cancer Society. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

Keywords: biomarkers, cancer, gene expression profiling, drug target, molecular-targeted therapy, molecular profiling, mutation, precision medicine, sequence analysis

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MOLECULAR TESTING FOR SOLID TUMORS 2019

- Includes the Current Recommendations for Biomarker/Molecular Testing for the Following Solid Tumors
- Can be Single Test or Molecular Profiling Assay
  - ANY Solid Tumor – Microsatellite Instability and Mismatch Repair Testing
  - Non-Small Cell Carcinoma of Lung
  - Colon and Rectum
  - Gastric, Esophageal and GE Junction
  - Pancreas
  - Prostate
  - Endometrial
  - Ovarian
  - Breast
  - Brain and Central Nervous System
  - Sarcoma
  - Head and Neck
  - Melanoma
  - Somatic Mutations that could also be Germline Mutations
  - And much more….

TABLE 7. Broadening Molecular Profiling Boundaries—Biomarker-Targeted Therapy Matches

TARGETED MUTATION	DRUG
NCI-MATCH trial: NCT02465060[a]	
EGFR activating mutation	Afatinib
HER2 activating mutation	Afatinib
BRCA1 or *BRCA2* mutations	Adavosertib (AZD1775)
FGFR pathway aberrations	AZD4547
NRAS12, NRAS13, NRAS61 mutation	Binimetinib
AKT mutation	Capivasertib (AZD 5363)
PIK3CA mutation	Copanlisib
PTEN mutation	Copanlisib
PTEN loss	Copanlisib
MET amplification	Crizotinib
MET exon 14 deletion	Crizotinib
ALK translocation	Crizotinib
ROS1 translocation or inversion	Crizotinib
BRAF V600E/V600R/V600K/V600D mutation	Dabrafenib + trametinib
DDR2 S768R, I638F, or L239R mutation	Dasatinib
NF2 inactivating mutation	Defactinib
PTEN mutation or deletion and PTEN expression	GSK2636771 (PI3Kβ inhibitor)
PTEN loss	GSK2636771 (PI3Kβ inhibitor)
FGFR mutation or fusion	Erdafitinib
FGFR amplification	Erdafitinib
NTRK1, NTRK2, NRTK3 gene fusions	Larotrectinib (LOXO-101)
Loss of *MLH1* or *MSH2* (by IHC)	Nivolumab
EGFR T790M or rare activating mutation	Osimertinib
CCND1, CCND2, CCND3 amplification & Rb expression	Palbociclib
CDK4 or *CDK6* amplification and Rb protein	Palbociclib
HER2 amplification ≥7 copy numbers	Pertuzumab + trastuzumab
TSC1 or *TSC2* mutation	Sapanisertib
mTOR mutation	Sapanisertib
cKIT exon 9, 11, 13, or 14 mutation	Sunitinib
PIK3CA mutation	Taselisib
GNAQ/GNA11 mutation	Trametinib
BRAF fusion or *BRAF* non-V600 mutation	Trametinib
NF1 mutation	Trametinib
HER2 amplification	Trastuzumab emtansine
SMO/PTCH1 mutation	Vismodegib

INFORMATION SOURCES AND RESOURCES

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- American Cancer Society; 2019 Cancer Facts and Figures
- AACR Cancer Progress Report 2018; Harnessing Research Discoveries for Patient Benefit
- Update on National Cancer Moonshot Initiative
- NCI Match Trial Mutations and Agents
- 2018 New Drug Approvals Report (/downloads/Drugs/DevelopmentApprovalProcess/DrugInnovation/UCM629290.pdf)
- ASCO Clinical Cancer Advances 2019 – ASCO's Annual Report on Progress Against Cancer
- Advancing Quality Cancer Care – NCCN 2018 Annual Report
- The Current State of Molecular Testing in the Treatment of Patients With Solid Tumors, 2019; CA CANCER J CLIN 2019;69:305–343
- Cancer Statistics, 2019; CA CANCER J CLIN 2019;69:7–34
- A Blueprint for Cancer Screening and Early Detection: Advancing Screening's Contribution to Cancer Control; CA CANCER J CLIN 2019;69:50–79

Thank You