Welcome
We’re Glad You Are Here

What’s New for 2013 and More
FCDS Annual Meeting Review

2013-2014 FCDS Webcast Series
Steven Peace, CTR
FCDS Staff and Guest Speakers
August 22, 2013

The Winds of Change …..
Florida Cancer Data System Annual Meeting
Day 1 - Thursday, July 25, 2013

Registration
Welcome and Introduction
Florida Department of Health
University of Miami Miller School of Medicine
DOH Update
Dr. Youjie Huang and Tara Hylton
FCDS Updates
– State of the State
Dr. Jill MacKinnon
Audit Results (CER, NPCR, FCDS)
Steve Peace
Comprehensive Cancer Control
Tara Hylton for Sue Higgins
Physician Office Reporting
– What this means to you
Dr. Jill MacKinnon
Data Quality Indicators
– What they mean
Brad Wohler
Break
Automated User Account System and FCDS Learning Management System
Dr. Jill MacKinnon and Melissa Williams
Florida’s CER Project
Dr. Monique Hernandez
Florida’s Environmental Public Health Tracking Program
Melissa Murray Jordan
Patient/Tumor Consolidation
– Benefits to Registries
Gary Levin
V13 Changes
Steve Peace
Lunch on your own
United Health Care/FCDS Collaboration
Brad Wohler
Florida System for Cancer Research and Collaboration
Dr. Robert Hood
Proactive Physician Reporting and Tx data
Dr. Monique Hernandez
FCDS Linkage with National Health Interview Survey
Dr. David Lee
Data Acquisition
– Evolution and Growth
Michael Thiry
Break
Jean Byers Presentation
Mike Thiry, Betty Fernandez
Round Table Discussion
DOH/FCDS Staff and Attendees
Wrap Up and Adjourn

The Winds of Change …..
Florida Cancer Data System Annual Meeting
Day 2 - Friday, July 26, 2013

Registration
ICD-3 Updates for 2014
Steve Peace
2013 SEER*Rx and Heme/Lymph DB Updates
Gema Midence
Clinical Edit Checks
– What Are They and Why Are They?
Steve Peace
Break
News from the NCCN 18th Annual Conference:
“Advancing the Standard of Cancer Care™
Mayra Espino and Judy Bonner
What’s New in Cancer Care:
– Updates to National Screening Guidelines
– Diagnostic Testing and Clinical Staging
– Tumor Markers and Cancer Genetics Testing
– Updates to Treatment Recommendations
– Text Documentation for All of the Above
Steve Peace and FCDS Staff
Adjourn
WHAT'S NEW FOR 2013 AND V13

FCDS Annual Meeting
July 26, 2013
Sunrise, Florida

Steven Peace, CTR
Gary Levin, CTR

2013 FCDS DATA ACQUISITION MANUAL

Newly reportable data items required to be collected
- Standard Data Item added FCDS CORE (Required for ALL Cases)

<table>
<thead>
<tr>
<th>NAACCR Item #</th>
<th>Item Name</th>
<th>Start Position</th>
<th>Stop Position</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>Addr at DX – Country</td>
<td>436</td>
<td>438</td>
<td>3</td>
</tr>
<tr>
<td>252</td>
<td>Birthplace State</td>
<td>442</td>
<td>443</td>
<td>2</td>
</tr>
<tr>
<td>254</td>
<td>Birthplace Country</td>
<td>444</td>
<td>446</td>
<td>3</td>
</tr>
<tr>
<td>1873</td>
<td>Addr Current – Country</td>
<td>430</td>
<td>441</td>
<td>3</td>
</tr>
</tbody>
</table>
Newly reportable data items required to be collected – con’t

- CS Site Specific Factor Added Back into Required Data Items – JAK 2 HemeRetic
- State-Specific Data Item (NAACCR Item #2200) Retained as FCDS CORE (Required for ALL Cases) but moved to NPCR-Specific Field (NAACCR Item #3720)

<table>
<thead>
<tr>
<th>NAACCR Item #</th>
<th>Item Name</th>
<th>2013 Start Position</th>
<th>2013 Stop Position</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3720</td>
<td>Height at Diagnosis</td>
<td>1315</td>
<td>1316</td>
<td>2</td>
</tr>
<tr>
<td>3720</td>
<td>Weight at Diagnosis</td>
<td>1317</td>
<td>1319</td>
<td>3</td>
</tr>
<tr>
<td>3720</td>
<td>Tobacco Use – Cigarettes</td>
<td>1320</td>
<td>1320</td>
<td>1</td>
</tr>
<tr>
<td>3720</td>
<td>Tobacco Use – OtherSmoke</td>
<td>1321</td>
<td>1321</td>
<td>1</td>
</tr>
<tr>
<td>3720</td>
<td>Tobacco Use – SmokelessTob</td>
<td>1322</td>
<td>1322</td>
<td>1</td>
</tr>
<tr>
<td>3720</td>
<td>Tobacco Use – NOS</td>
<td>1323</td>
<td>1323</td>
<td>1</td>
</tr>
</tbody>
</table>

**FCDS ABSTRACTOR CODE POLICY**

**SECTION 1: GUIDELINES FOR CANCER DATA RECORDING**

**C. ABSTRACTING**

1. Personnel Requirements

Trained personnel must perform abstracting. FCDS provides basic incidence abstracting training via web-based modules. In addition, FCDS performs on-site regional workshops on an as-needed basis.

Every register abstractor planning to work in the State of Florida is required to obtain an individual FCDS Abstractor Code. This code is assigned by FCDS to persons who successfully pass the FCDS Abstractor Code On Line Examination, regardless of certification by NCRA as a CCR, experience in the registry industry, or other factors. As of January 1, 2013, all individual abstractors are required to acquire a New FCDS Abstractor Code or planning to return an Existing FCDS Abstractor Code must take and pass the FCDS Abstractor Code Exam.

The FCDS Abstractor Code Requirement has been FCDS Policy for many years and applies to every cancer registry working in the state of Florida (Florida Cancer Data System Contract). All Absorbers are required to retain abstractor, regardless of number of years’ experience. FCDS will not accept cases from individuals without an active Certified FCDS Abstractor Code.

**FCDS ABSTRACTOR CODE POLICY**

**Questions are electronically selected at random from a pool of nearly 500 questions covering 8 major topic areas. No two exams will be alike.**

The 8-topic areas include:

- General Abstracting Knowledge
- General Abstracting Rules and Florida-Specific Rules
- Primary Site/Histology Guide
- Stage of Disease (Collaborative Stage Data Collection System and Site Specific Factors)
- Cancer Role Changes
- Treatment and Survival

**WHO NEEDS TO TAKE THE FCDS ABSTRACTOR CODE EXAM?**

- Individuals hoping to acquire a NEW FCDS Abstractor Code will need to take the New FCDS Abstractor Code Exam.
- If an individual’s FCDS Abstractor Code has been expired for greater than 2 years, the individual must re-apply and take and pass the New FCDS Abstractor Code Exam.

**WHO NEEDS TO TAKE THE FCDS ABSTRACTOR CODE REEXAM EXAM?**

- Individuals with an active FCDS abstractor code who need to take and pass the FCDS Abstractor Code Renewal Exam after their code has expired.
FCDS ABSTRACTOR CODE POLICY

- This test is NOT a substitute for the CTR Examination
- CTRs and non-CTRs MUST take the FCDS Abstractor Code Test
- Every person who abstracts must have their own FCDS Code

New to Florida Abstractors (no existing FCDS Abstractor Code)

- will take a test with 20 questions with no time limit
- Annual Renewal tests are 15 questions with 1 hour time limit
- If you fail the test twice – you must wait 7 days to take it again
- If you fail twice – you should not abstract cases until you pass
- A score of 80% is required to pass

NEVER share your FCDS Abstractor Code

FCDS ABSTRACTOR CODE POLICY

- Sources for FCDS Abstractor Code Test Questions:
  - Current FCDS Data Acquisition Manual
  - SEER Self Instructional Manuals
  - Book 2 - Cancer Characteristics and Selection of Cases
  - Book 3 - Tumor Registrar Vocabulary: The Construction of Medical Terms
  - Book 4 - Human Anatomy as Related to Tumor Formation
  - Collaborative Stage Data Collection System
  - Collaborative Stage Core Data Items
  - Site Specific Factors
  - ICD-O-3 and Updates
  - Multiple Primary and Histology Coding Rules - Solid Tumors
  - Hematopoietic and Lymphoid Neoplasms - MPH Rules and Data Base
  - Any NEW Rules, Tools, Instructions, Data Items, etc.

APPENDIX A-P

Appendix A: Florida Healthcare Facilities Currently Reporting to FCDS
Appendix B: Florida FIPS, USPS State Abbreviations and ISO Country Codes - NEW
Appendix C: Glossary and Standard Abbreviations - Updated
Appendix D: Race Coding Instructions and Race and Nationality Descriptions
Appendix E: Census List of Spanish Surnames
Appendix F: Site-Specific Surgery Codes
Appendix G: FCDS 2013 Record Layout (NAACCR Version 13)
Appendix H: 2013 FCDS Required CSV2.04 Site Specific Factors (SSFs)
Appendix I: Free-Standing Radiation Therapy Centers Cancer Case Identification Program
Appendix J: Height Conversion Tables - Converting Feet to Inches
Appendix K: Weight Conversion Tables - Converting Kilograms to Pounds
Appendix L: FCDS Test Documentation Requirements - Updated
Appendix M: Hematopoietic and Lymphoid Neoplasm Master Code Lists (alpha/numeric)
Appendix N: 2013 FCDS Casefinding List for Reportable Tumors
Appendix O: 2013 Resources for Registrars
Appendix P: FCDS Frequently Asked Questions (FAQ)
APPENDIX C - UPDATED

APPENDIX C
BREAST CANCER PROFILE EXPLAINING ER/PR/HER2 PROGNOSTIC FACTORS
SEER PROGRAM CODING AND STAGING MANUAL, 2013
LINK TO CODING GUIDELINES FOR SPECIFIED SITES

GLOSSARY OF COMMON TERMS

STANDARD ABBREVIATIONS

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APPENDIX C - UPDATED

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APPENDIX C - UPDATED

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APPENDIX C - UPDATED
## APPENDIX L - TEXT DOCUMENTATION

Below is a list of FDAS Required Data items that carry an additional requirement of complete and accurate text documentation. See Table on Following Page for Specific Example for each Text Area.

### DATA ITEMS REQUIRING COMPLETE TEXT DOCUMENTATION

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Dx</td>
<td>Day, month, year or date of diagnosis</td>
</tr>
<tr>
<td>Age</td>
<td>Age of patient</td>
</tr>
<tr>
<td>Sex</td>
<td>Gender</td>
</tr>
<tr>
<td>Racial/ethnic</td>
<td>Race/Ethnicity</td>
</tr>
<tr>
<td>Primary Site</td>
<td>Primary diagnosis site</td>
</tr>
<tr>
<td>Surgery</td>
<td>Surgery performed</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>Chemotherapy administered</td>
</tr>
<tr>
<td>Procedure</td>
<td>Procedure performed</td>
</tr>
<tr>
<td>Radiation</td>
<td>Radiation administered</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>Chemotherapy administered</td>
</tr>
<tr>
<td>Grade</td>
<td>Grade of tumor</td>
</tr>
<tr>
<td>CS Index</td>
<td>CS Index</td>
</tr>
<tr>
<td>CS Subtype</td>
<td>CS Subtype</td>
</tr>
<tr>
<td>CS Level</td>
<td>CS Level</td>
</tr>
<tr>
<td>CS Histology</td>
<td>CS Histology</td>
</tr>
<tr>
<td>CS Metastasis</td>
<td>CS Metastasis</td>
</tr>
<tr>
<td>Any Other Events</td>
<td>Any other events</td>
</tr>
</tbody>
</table>

---

Text documentation should always include the following components:

- **Date(s)** - include date(s) for event(s) - this allows the reviewer to determine event chronology.
- **Detail** - note any details and context of the event.
- **Location** - include location of event (site/tissue/treatment).
- **Description** - include a description of the event (outcome), treatment(s), and other relevant information.
- **Outcomes** - include any outcomes of the event.
- **Notes** - include any additional notes or information.
- **Other** - include any other relevant information.

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**DO NOT INCLUDE INFORMATION** from any other sources or sections.

**DO NOT USE Abbreviations** (Appendix B).

**DO NOT USE Non-Standard or Unofficial Terms**.

Enter "NA" or "*available*" when no information is available related to any specific text data.
APPENDIX P – FCDS IDEA AND ACCOUNTS

Frequently Asked Questions
- Do I need an FCDS IDEA User Account?
- How do I create an FCDS IDEA User Account?
- Procedure for Lost User ID/Password?
- How do I renew my FCDS User Account?
- Who can be a Facility Access Administrator (FAA)?
- Which Facilities are Required to Establish an FAA Account?
- How do I apply for the FAA Role?
- How do I manage User Role Assignments?
- What is an FCDS Abstractor Code?
- Do I need an FCDS Abstractor Code?
- How do I obtain an FCDS Abstractor Code?

FCDS EDITS V13A METAFILE

NEW FCDS EDITS METAFILE V13A

<table>
<thead>
<tr>
<th>Changes Made To FCDS EDITS v13 MetaFile</th>
<th>Effective Dec. 17, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Edit Name</td>
<td>Old Edit Name</td>
</tr>
<tr>
<td>Edit in the Country (4)</td>
<td></td>
</tr>
<tr>
<td>Edit in the Country (4A)</td>
<td></td>
</tr>
<tr>
<td>Edit in the State of Program (12)</td>
<td></td>
</tr>
<tr>
<td>Edit in the State of Program (12A)</td>
<td></td>
</tr>
<tr>
<td>Edit in the Country (4B)</td>
<td></td>
</tr>
<tr>
<td>Edit in the Country (4C)</td>
<td></td>
</tr>
<tr>
<td>New Edit</td>
<td></td>
</tr>
<tr>
<td>New Edit</td>
<td></td>
</tr>
<tr>
<td>New Edit</td>
<td></td>
</tr>
<tr>
<td>New Edit</td>
<td></td>
</tr>
<tr>
<td>New Edit</td>
<td></td>
</tr>
<tr>
<td>New Edit</td>
<td></td>
</tr>
</tbody>
</table>
NEW FCDS EDITS METAFILE V13A

1. Larynx (ICD-O-2 161.12)
   New edit
2. Bladder (ICD-O-2 894.3)
   New edit

COMING ATTRACTIONS

- 2014 - ICD-0-3 Updates - PENDING
- 2014 - MPH Rules and Data Base for Solid Tumors
- 2014 - ICD-10-CM Implementation
- 2014 - CSV02.05 – no major changes, fewer SSFs required
- 2014 - More CS EDITS

IMPORTANT REMINDERS

- Diagnosis Date is often date of imaging not date of biopsy
- Only ONE Accession Number per Patient – Alt Acc # Field
- All sequences must be reported when reporting any case with multiple primaries – Historical Grid for inactive cancers
- Completeness and Consolidated Follow-Back
- Timeliness: Each facility must report at least quarterly
- Facilities reporting >500 cases/year should report monthly
IMPORTANT REMINDERS

- Abstractors must have access to and use available resources such as Heme DB and SEER*Rx and new MPH DB
- Please refer to MPH Rules and Heme MPH Rules
- Please refer to Heme DB for coding Heme/Lymph Histology
- Check your drop-down selections - not a substitute for rules
- Contact FCDS with abstracting and coding questions

2013 NPCR DATA QUALITY EVALUATION: RESULTS AND RECOMMENDATIONS

FCDS Annual Meeting
July 26, 2013
Sunrise, Florida

Steven Peace, CTR
Megsys Herna, CTR
FCDS Data Quality Staff

PURPOSE OF NPCR DQE

- Assess the quality of the data of NPCR-funded, statewide, population-based cancer registries.
- These data are a crucial part of cancer surveillance systems because they are used for planning, operating, funding, and evaluating cancer control programs.
- Complete and accurate data are essential to estimate variations in and changes among population subgroups over time.
- The evaluation assessment is based on the existence of appropriate policies and procedures for the following:
  - Data consolidation
  - Assessment of data quality
  - Text documentation
### DATA ELEMENTS REVIEWED

<table>
<thead>
<tr>
<th>Cancer Identification</th>
<th>Collaborative Staging</th>
<th>Treatment 1st Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Site</td>
<td>CS Tumor Size</td>
<td>Rx Tumor-BegRTx</td>
</tr>
<tr>
<td>Subsite</td>
<td>CS Extension</td>
<td>Rx Tumor-BegHorm/1St</td>
</tr>
<tr>
<td>Laterality</td>
<td>CS Tumor Size Extent</td>
<td>Rx Tumor-BegRTx/2St</td>
</tr>
<tr>
<td>Histology</td>
<td>CS Lymph Nodes</td>
<td>Rx Tumor-BegRTx/3St</td>
</tr>
<tr>
<td>Behavior</td>
<td>CS Mets at Dx</td>
<td>Rx Tumor-BegRTx/4St</td>
</tr>
<tr>
<td>Grade</td>
<td>CS Site-Specific Factor 1</td>
<td>Rx Tumor-BegRTx/5St</td>
</tr>
<tr>
<td>Date of Diagnosis</td>
<td>CS Site-Specific Factor 2</td>
<td>Rx Tumor-BegRTx/6St</td>
</tr>
<tr>
<td>Sequence Number–Central</td>
<td>CS Site-Specific Factor 3</td>
<td>Rx Tumor-BegRTx/7St</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rx Tumor-BegRTx/8St</td>
</tr>
</tbody>
</table>

### DQE METHODOLOGY – VISUAL EDITING

- Evaluator reviewed all data elements included in the evaluation as well as the corresponding text for each abstract-level case.
- Any abstract-level codes not substantiated by text were recoded.
- Errors resulted when there was 1) a complete lack of text to support the coded data element or 2) the text was available but the coded data element was incorrect.

### ELEMENTS OF DQE

- Visual Editing
- Consolidation Validation
- NPCR Clinical Edit Checks
- FCDS Policy and Procedures Manual
- Final Report to NPCR and FCDS
- Recommendations
A total of 200 cases were reconsolidated.
A total of 5,483 data elements could have had errors
181 data elements were found to have errors.

<table>
<thead>
<tr>
<th>Site</th>
<th>Number of Elements Reviewed</th>
<th>Number of Elements With Errors</th>
<th>Number of Elements Without Errors</th>
<th>Accuracy Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colon</td>
<td>480</td>
<td>17</td>
<td>463</td>
<td>96.46%</td>
</tr>
<tr>
<td>Rectum</td>
<td>216</td>
<td>7</td>
<td>209</td>
<td>96.76%</td>
</tr>
<tr>
<td>Lung</td>
<td>1,800</td>
<td>53</td>
<td>1,747</td>
<td>97.06%</td>
</tr>
<tr>
<td>Female Breast</td>
<td>1,536</td>
<td>49</td>
<td>1,487</td>
<td>96.81%</td>
</tr>
<tr>
<td>Corpus Cervix</td>
<td>350</td>
<td>2</td>
<td>348</td>
<td>99.23%</td>
</tr>
<tr>
<td>Prostate</td>
<td>575</td>
<td>23</td>
<td>552</td>
<td>96.00%</td>
</tr>
<tr>
<td>Total</td>
<td>4,907</td>
<td>151</td>
<td>4,756</td>
<td>96.92%</td>
</tr>
</tbody>
</table>

2013 DQE RESULTS

- Overall Accuracy Rate = 96.9% - Commendation
- Visual Editing Accuracy Rate = 96.0% - Commendation
- Reconsolidation Accuracy Rate = 96.0% - Commendation
- FCDS is encouraged to continue conducting visual editing to maintain data quality in the State, in addition to reviewing basic abstracting principles with staff and data reporters and emphasizing to all reporting facilities that text documentation to support data element code selection is required.
- Text documentation should support all coding decisions.
- Text documentation should support all consolidation decisions.
1. Provide an overview of abstracting principles to staff and data reporters.

2. State training should include a focus on the following data items:
   - CS Extension and CS Metastasis at Diagnosis
   - CS Tumor Size, CS Extension, and CS Lymph Nodes when neoadjuvant treatment is administered
   - RX Summary Surgery Primary Site and RX Summary Scope
     Regional Lymph Node Surgery particularly as they apply to breast cancer and sentinel lymph nodes
   - Date of Diagnosis: Review diagnostic language, including ambiguous terminology
   - Rules for coding Site-Specific Factors including training regarding text documentation

3. Visual Editing Review and Consolidation:
   - Educating all reporting facilities that text documentation, with dates, is required for all data elements, preferably using hands-on training
FCDS FOLLOW-UP PLAN

- Share NPCR Audit Results with Reporters
- Introduce Clinical Edit Checks to Registrars
- Reinforce Text Documentation Requirements
- Reinforce FCDS QC Review/Visual Editing Rationale
- Incorporate Recommendations into 2013 FCDS Webcast Series
- Reinforce FCDS QC Review/Visual Editing Feedback Procedures
- Standardize Format for FCDS Policy and Procedures Manual

PURPOSE OF CLINICAL EDIT CHECKS

- The primary purpose of the Clinical Check edits is to evaluate reported prognostic and treatment items for cancer cases with specific tumor characteristics.
  - Missing/Incomplete Tumor Characteristics (site/type/stage)
  - Missing/Incomplete Site-Specific Factors (prognostic factors)
  - Missing/Incomplete First Course Treatment
- Clinical Checks are based on consensus measures for quality of cancer care developed by CoC and NPCR for specified cancers.
- Endorsed by National Quality Forum, CoC, ASCO, and NCCN.
- If the reported treatment does not appear to be consistent with widely recognized standards of care or cases fail to contain known prognostic characteristics, a warning is generated.
Any discrepancy generated warning that standard treatment not captured or recorded.
Florida Tracking Program Overview

- Environmental Public Health Tracking (Tracking) focuses on surveillance of environmental factors and related health outcomes
  - Examples of environmental factors: drinking water contaminants, ozone, particulate matter, community design
  - Examples of health outcomes: asthma, birth defects, cancer, cardiovascular disease, heat-related illness, birth outcomes
- Funded through a cooperative agreement with CDC since 2003

Tracking Web Portal –
www.floridatracking.com

Cancer – Core Indicators

- Nationally Consistent Data Measures (NCDMs) – indicators displayed by all Tracking grantees
  - Bladder
  - Brain & other Nervous Systems
  - Breast
  - Leukemia (Acute Lymphocytic, Acute Myeloid, Chronic Lymphocytic)
  - Lung & Bronchus
  - Non-Hodgkin’s Lymphoma
  - Thyroid
Cancer – Core Indicators (New)

- New NCDMs
  - Kidney & Renal Pelvis
  - Liver & Intrahepatic Bile Duct
  - Melanoma of the Skin
  - Mesothelioma
- Tobacco Related
  - Esophagus
  - Larynx
  - Oral Cavity & Pharynx
  - Pancreas

Data Reports & Tools

Data Reports & Tools (continued)
Florida’s System for Cancer Research & Collaboration

Robert Hood, Ph.D.
Manager, Florida System of Cancer Research and Collaboration
robert_hood@doh.state.fl.us (850) 245-4585

- Use existing state structures
  - C-CRAB, BRAC, registry
  - Bankhead-Coley, King
- Establish state cancer research agenda
- Enhance collaborations between researchers and develop research networks
- Develop metrics to evaluate health impact of research

FL System for Cancer Research & Collaboration

Cancer Center of Excellence Award

- Establishes a Cancer Center of Excellence Award (381.925 F.S.)
  - Encourage excellence in patient-centered, coordinated cancer care
  - Attract and retain the best care providers
  - Help Florida providers to be recognized nationally as a preferred destination for quality cancer care
- After January 1, 2014 DOH will conduct two application cycles annually
Florida Department of Health  
Division of Community Health Promotion  
Bureau of Chronic Disease Prevention

Sue Higgins, MPH  
Director, Comprehensive Cancer Control Program

• Goal I: Infrastructure  
• Goal II: Prevention  
• Goal III: Treatment/Access to Care  
• **Goal IV: Survivorship**
  
  "Floridians affected by cancer are aware of and have access to quality, appropriate services for quality of life, palliative care, and survivorship.

American College of Surgeons  
Commission on Cancer  
**Standard 3.3 Survivorship Care Plan**

The cancer committee develops and implements a process to disseminate a comprehensive care summary and follow-up plan to patients with cancer who are completing cancer treatment. The process is monitored, evaluated, and presented at least annually to the cancer committee and documented in minutes.
Cancer Control and Research Advisory Council (CCRAB)

Goal 4: Survivorship Committee

Created a brochure to help explain what cancer treatment summaries and survivorship care plans are and why are they important

SUCCESS THROUGH COLLABORATION: ENHANCING SURVEILLANCE DATA WITH INSURANCE CLAIMS

Brad Wohler
Florida Cancer Data System
FCDS Annual Meeting 2013

PHYSICIAN OFFICE REPORTING WHAT THIS MEANS TO YOU

Dr. Jill A. MacKinnon
FCDS Project Director
**Pro-Active Reporting of Physician Medical Claims Data: Capturing Complete and Missed Treatment Data**

MONIQUE HERNANDEZ, PHD
FLORIDA CANCER DATA SYSTEM
ANNUAL MEETING
SUNRISE, FL
JULY 25-26, 2013

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**The Model is Changing**

- The management of cancer has evolved and no longer fits the model implemented in the late 1970's when FCDS was designed
  - Diagnosis and treatment of many cancers shift from the hospital to the private practitioner's office

- As more and more cancer patients become cancer survivors, more information is needed by the medical community to improve the quality of life for our cancer survivors

- Survival is no longer the only salient endpoint

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**Ramifications of old Model on Cancer Surveillance and Data on the Cancer Patient**

- **Underestimates of incidence of certain cancers**
  - Dx/Tx taking outside of hospital

- **Treatment incomplete**
  - Not capturing full course of treatment, especially chemo

- **Data used by policy makers**
  - Misallocation of funds and services
  - Unable to identify areas/subgroups in need

- **Data Used by Researchers**
  - Sampling frame for patient studies
  - Data for hypothesis driven research
  - Trends over time
New Model

Physician reporting via medical claims data

Incorporate/Operationalize Medical Claim Form

Electronic Data

- National standard record layout currently used by every private practitioner in the nation
  - 837 Record, Version 5010

- Using existing insurance industry standard record layout (837 record)
  - Patient demographics
  - Patient diagnosis codes
  - Procedure codes -- Cancer directed treatment
  - Date of last contact

HICFA 1500 -- Demographics
### HICFA 1500 – Diagnosis and Procedures

<table>
<thead>
<tr>
<th>Service Dates</th>
<th>Procedure Codes</th>
<th>Provider NPI #</th>
</tr>
</thead>
</table>

### Physician Office Reporting Using Medical Claims Data

- Data submitted to FCDS at the same time physician’s normal insurance submission
- Crosswalk/derive treatment/procedure codes to cancer registry codes
  - HCPC – Healthcare Common Procedure Coding System
  - Anti-neoplastic agents, RT, Hormones
  - Ancillary therapies to enhance chemo tolerance

### FCDS Partnerships and Special Projects

- **Florida Cancer Specialists – Pilot**
  - Largest privately owned oncology/hematology practice
    - 120 physicians - 70 nurse practitioners
    - 60 clinical offices
      - Located in 33 of Florida’s 67 counties
      - Captures roughly 40% of market in Florida
- **Zexion -- Dr. Lynne Penberthy and Mr. Davis Gentry**
- **CDC’s CER Project – Special data collection of additional treatment information for Dx 2011**
Broad Learning Objectives

- How effective are claims data in augmenting registry records?
- How use of this new data source can assist the hospital based registrar?
- Is there potential for creating a ‘virtual abstract’ from disparate data streams?

Data Capture and Evaluation
a Florida Pilot Project

Data Capture via multiple methods
- CER -- Comparative Effectiveness Research Project
  - Expanded treatment captured by CTR from Florida Cancer Specialists’ electronic medical record system
- Routine capture using consolidated hospital abstracts – Registry Core Record
General Descriptive Analysis

Objectives:
- To compare summary chemo treatment information from claims records against core treatment records using CER as a gold standard.
- This will help us answer two main questions...

Answer Two Questions

1. Can the claims data produce incident Tx data according to NAACCR standards (first course chemo)?
   Chemo given yes/no

2. Can the claims data augment the existing NAACCR standard treatment data?
   Chemo single/multiple agents

Methods for Identifying Study Sample

Study Sample 660 Patient Tumors
Q1: Can the claims data produce incident Tx data according to NAACCR standards (first course chemo)?

<table>
<thead>
<tr>
<th>Core FCDS Incident Tx Data</th>
<th>Claim Treatment Data</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>127</td>
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<td>Total</td>
<td>194</td>
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<td>No</td>
<td>Yes</td>
<td>75</td>
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<tr>
<td></td>
<td>No</td>
<td>295</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>370</td>
</tr>
</tbody>
</table>

- Study sample N=660
- 70% agreement on Treatment
- 71 records from core Tx No to Tx Yes
- Existing FCDS Chemo Tx given went from 30% to 40%
- Treatment data validated by CER (82%)
- Limitations: claims records have gaps in services

Q2: Can the claims data augment the existing NAACCR standard treatment data where treatment is given?

<table>
<thead>
<tr>
<th>Core FCDS Incident Tx Data</th>
<th>Incident Tx Data Computed from Claim Records is greater than*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19</td>
</tr>
<tr>
<td>No</td>
<td>26 (same code)</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>48</td>
</tr>
</tbody>
</table>

* NOS to single/multi agent chemo, or single to multi agent chemo
Data Enhancement

- Date of Last Contact
  - 94% of matched records updated

- Treatment
  - Chemo treatment changed by 37%
  - Treatment NOS went down from 31% to 18%
  - 21% Granular Tx detail (chemo agents)

Two Questions

1. Can the claims data produce incident Tx data according to NAACCR standards (first course chemo)?
   - YES!

2. Can the claims data augment the existing NAACCR standard treatment data?
   - YES!

What Does This Mean to You?

- Once fully operational
  - FCDS can and will provide you with
    - Detailed treatment and dates
    - Dates of last contact
    - Patient status
Your Responsibility

- Download F/U files from FCDS
- Modify registry software to integrate new data
- Should greatly minimize - eliminate your follow-up burden

ICD-O-3 UPDATES - PENDING

FCDS Annual Meeting
July 26, 2013
Sunrise, Florida

Steven Peace, CTR
ICD-O-3 Work Group
**2011 ICD-O-3 UPDATES SUMMARY**

- 29 non-CNS benign and borderline entities
- 8 new reportable terms
- 31 hematopoietic and lymphoid terms – approved 2010
- 18 new histology/behavior including word “dysplasia” behavior = 2.
- The term “in-situ” no longer used in to describe neoplasms arising in the GI tract – now called “glandular dysplasia high grade,” “high grade dysplasia” or “intraepithelial neoplasia, high grade”
- Carcinoid of Appendix changes to a Reportable Malignancy
- Clarification/Explanation of two confusing heme codes
- 5 new preferred terms replace outdated ICD-O-3 terms
- Many related terms and synonyms added to existing codes

**ICD-O-3 WORK GROUP – SCOPE OF WORK**

1. Review WHO ICD-O-3 Update list
2. Heme/Lymph New Codes already accepted
3. Determine possible impact of new terms/codes
4. Canada has already implemented WHO ICD-O-3 Update
5. Utilize Guest Experts in Pathology and WHO Classification of Diseases for Oncology
6. Identify associated files, lists, programs, and documents that will be affected by changes
7. The ICD-O-3 Work Group recommends implementation of the non-controversial terms and the few completely new codes as soon as possible.

**WHO CLASSIFICATION OF DISEASES**

- Completed Fourth Edition Updates Include:
  - 2007 – Tumors of Central Nervous System
  - 2008 – Tumors of Hematopoietic and Lymphoid Tissues
  - 2010 – Tumors of Digestive System
  - 2011 – Tumors of Breast
  - 2012 – Tumors of Soft Tissue and Bone
WHO CLASSIFICATION OF DISEASES

- PENDING Fourth Edition Updates Include:
  - Tumors of Head and Neck
  - Tumors of Urinary System
  - Tumors of Skin
  - Tumors of Lung, Pleura, Thymus, Heart
  - Tumors of Female Genital System
  - Tumors of Male Genital System

ICD-0-3 WORK GROUP – NOT IN SCOPE

1. New terminology and behavior for bronchioloalveolar carcinoma. Note: Terms are already in use by pathologists around the US and Canada.
2. Reportability guidelines for GIST tumors. Note: This has been partially addressed in a sentence added to FORDS 2013 and the SEER 2013 Coding Manual, which indicate that GIST and thymoma are reportable when there is evidence of multiple foci, lymph node involvement, or metastasis.
3. WHO Classifications of Soft Tissue and Bone as well as Breast have been published since 2011, and more updated volumes of the WHO Classification are planned.
4. NAACCR needs to be proactive in deciding how to handle new codes, obsolete codes, and other changes published in these volumes.

HGD/IEN/CIS AND IMC OF GI TRACT

- IEN/HGD/CIS of Genital Sites - Squamous Epithelium
- IEN/HGD/CIS of GI Tract – Glandular Epithelium
- IEN – Intra-EPithelial Neoplasia
- HGD – High Grade Dysplasia
- CIS – Carcinoma in Situ
- IMC of GI Tract – Intramucosal Carcinoma
  - Invades lamina propria with no involvement of muscularis mucosa
- Non-Invasive (in-situ) Neoplasms DO NOT Metastasize
- Retire “polyp” in-situ codes (8210/2, 8261/2, 8263/2)
GI TRACT TOPGRAPHY CODES

- C15.* - Esophagus
- C16.* - Stomach
- C17.* - Small Intestine
- C18.* - Colon (includes appendix)
- C19.* - Rectosigmoid Colon
- C20.* - Rectum
- C23.* - Gall Bladder
- C24.* - Bile Ducts
- C25.* - Pancreas

Excludes: Anus (C21.*) and Liver (C22.*)

ICD-O-3 WORK GROUP RECOMMENDATIONS

- Reportability Changes
  - 8240/3 – Carcinoid Tumor, NOS of Appendix (C18.1)
- Accept All Heme/Lymph Changes in Heme DB
- Correct a few Heme/Lymph Terms or Codes in Heme DB
  - 9960/3 – Myeloproliferative Neoplasm, NOS
  - 9971/1 – Post Transplant Lymphoproliferative Disorder, NOS
  - 9571/3 – Polymorphic Post Transplant Lymphoproliferative Disorder

DO NOT USE [OBS] or (obs) Codes

<table>
<thead>
<tr>
<th>Obsolete ICD-O Codes</th>
<th>Neoplasms of Hematopoietic and Lymphoid Tissue</th>
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</thead>
<tbody>
<tr>
<td>9654</td>
<td>9675</td>
</tr>
<tr>
<td>9681</td>
<td>9684</td>
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<tr>
<td>9682</td>
<td>9728</td>
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<td>9694</td>
<td>9855</td>
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<td>9836</td>
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<td>9729</td>
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<td>9670</td>
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</tr>
<tr>
<td>9650</td>
<td>9750</td>
</tr>
<tr>
<td>9687</td>
<td>9884</td>
</tr>
<tr>
<td>9687</td>
<td>9894</td>
</tr>
</tbody>
</table>
ICD-O-3 WORK GROUP RECOMMENDATIONS

- NO ACTION AT THIS TIME - The ICD-O-3 Update Implementation Work Group recommends NO ACTION for the following codes and terms in the WHO Update until the impact of a reportability change for terminology that includes “dysplasia” can be further assessed.

- Current reportability legislation affects these codes/terms
  - All new codes/terms w/reference to high grade intraepithelial neoplasia or dysplasia of GI Tract (esophagus, colon, pancreas, biliary, other GI Tract)
    - Squamous Neoplasms
    - Glandular (adenoc) Neoplasms
    - Mucinous cystic neoplasms
    - Papillary neoplasms

ICD-O-3 WORK GROUP RECOMMENDATIONS

- NO ACTION AT THIS TIME - continued

- Adoption Delay will create confusion pathology/cancer registry
- Many proposed Update CodesTerms and pending 4th edition Blue Books reflect current terminology already in use by pathologists
  - BL46/2 - Glandular intraepithelial neoplasia (dysplasia), high grade when the term in situ is not used in conjunction with the diagnosis
  - 8453/2 - Intraductal papillary mucinous neoplasm with high grade intraepithelial neoplasia/high grade dysplasia (no invasive tumor)
- No New ICD-Codes Yet Proposed by WHO to reflect Changes in Bronchoalveolar Lung Adenocarcinoma using Travis Classification
  - All BAC now called something else
    - Adenocarcinoma in situ (formerly BAC)
    - Mucinous Adenocarcinoma with Lepidic Pattern (formerly mucinous BAC)
    - Adenocarcinoma Lepidic Predominant (formerly non-mucinous BAC)
    - Colloid Adenocarcinoma (formerly mucinous cystadenocarcinoma)
    - Enteric Adenocarcinoma (similar to colorectal adenocarcinoma)
- All proposed changes in turn effect CS, TNM, Tx, etc

IMPACT ON CANCER REGISTRARS?

- Adoption Delay will create confusion pathology/cancer registry
- Many proposed Update CodesTerms and pending 4th edition Blue Books reflect current terminology already in use by pathologists
  - BL46/2 - Glandular intraepithelial neoplasia (dysplasia), high grade when the term in situ is not used in conjunction with the diagnosis
  - 8453/2 - Intraductal papillary mucinous neoplasm with high grade intraepithelial neoplasia/high grade dysplasia (no invasive tumor)
SYNCHRONIZED UPDATES REQUIRED

1. FORDS/SEER/State Coding Manual Updates
2. Volume II Reportable Case Matrix (high grade dysplasia for GI cancers)
3. Casefinding List Review (are there any specific ICD-9-CM diagnosis and/ or procedure codes associated with the new histologies)
4. SEER Site/Type Table Update
5. CoC Site-Specific Surgery Codes – Histology-Driven “Sites”
6. MDR Rules Solid and Hematopoietic/Lymphoid Neoplasms – Histology-Driven “Rules” and Resources (DB and web-resources)
7. AJCC/TNM – Histology Inclusion Tables and Histology-Driven Chapters
8. Collaborative Stage Data Collection – Histology Inclusion Tables
9. Collaborative Stage Data Collection – any special SSFs included/excluded
10. Automated/Manual Tumor Consolidation Histology Pairs Tables
11. Standard EDITS and State-Specific EDITS
12. SEER Lymphoma Subtype Recode (CD-3-Histology Driven Recodes)
13. SEER Site/Type Table Update
14. CoC Site-Specific Surgery Codes – Histology-Driven “Sites”
15. MPH Rules Solid and Hematopoietic/Lymphoid Neoplasms – Histology-Driven “Rules” and Resources (DB and web-resources)
16. International Classification of Childhood Cancer (ICCC) Recodes – Histology-Driven Recodes
17. Histology Code Conversion(s) if any are required
18. Software-related: Updates to scoped lookups (based on site/histo)
19. Software-related: Site/Histo grouping updates as required where available for ad-hoc reports
20. Revisions: Does that include codes being added, deleted, converted?

CODING GRADE/DIFFERENTIATION

- 2010 - Immunophenotype Lymphoid Neoplasms
- 2010 - Immunophenotype Myeloid Neoplasms
- 2013 - Discontinue Grade Path Value
- 2013 - Discontinue Grade Path System
- 2013 - CONSENSUS GUIDELINES PROPOSED

- FINAL REVISIONS PENDING
  - Clarify Grade for In-Situ Tumors
  - Implied Grade for Brain Tumors
  - Implied Grade for Solid Tumors
  - Site-Specific Factors for Grade
  - Grade Conversion Tables
  - Conversion Algorithms

GRADE CLARIFICATIONS

<table>
<thead>
<tr>
<th>Special Grade Systems for Solid Tumors</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS Schema</td>
</tr>
<tr>
<td>Special Grade System</td>
</tr>
<tr>
<td>Breast</td>
</tr>
<tr>
<td>Nottingham or Bloom-Richardson Score/Grade</td>
</tr>
<tr>
<td>Prostate</td>
</tr>
<tr>
<td>Gleason Score on Needle Core Biopsy/TURP</td>
</tr>
<tr>
<td>Prostate</td>
</tr>
<tr>
<td>Gleason Score on Prostatectomy/Autopsy</td>
</tr>
<tr>
<td>HeartMediastinum</td>
</tr>
<tr>
<td>Grade for Sarcomas</td>
</tr>
<tr>
<td>Peritoneum</td>
</tr>
<tr>
<td>Grade for Sarcomas</td>
</tr>
<tr>
<td>Retropertioneum</td>
</tr>
<tr>
<td>Grade for Sarcomas</td>
</tr>
<tr>
<td>SoftTissue</td>
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<tr>
<td>Grade for Sarcomas</td>
</tr>
<tr>
<td>Kidney/Parenchyma</td>
</tr>
<tr>
<td>Fuhrman Nuclear Grade</td>
</tr>
</tbody>
</table>
## Grade Clarifications

### 2 Grade System

<table>
<thead>
<tr>
<th>Code</th>
<th>Terminology</th>
<th>Histologic Grade</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>Low grade</td>
<td>1/2</td>
</tr>
<tr>
<td>4</td>
<td>High grade</td>
<td>2/2</td>
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### 3 Grade System

<table>
<thead>
<tr>
<th>Code</th>
<th>Terminology</th>
<th>Histologic Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low grade, well to moderately differentiated</td>
<td>I/II or 1/2</td>
</tr>
<tr>
<td>2</td>
<td>Medium grade, moderately undifferentiated, relatively undifferentiated</td>
<td>II/III or 2/3</td>
</tr>
<tr>
<td>3</td>
<td>High grade, poorly differentiated to undifferentiated</td>
<td>III/III or 3/3</td>
</tr>
</tbody>
</table>

## Grade Clarifications

<table>
<thead>
<tr>
<th>Description</th>
<th>CS Code</th>
<th>Grade Code</th>
<th>AJCC 7th 2013</th>
<th>AJCC 6th SEER prior to 2003</th>
<th>SEER 2003-2013</th>
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</thead>
<tbody>
<tr>
<td>Gleason Score</td>
<td>2</td>
<td>002</td>
<td>G1</td>
<td>G1</td>
<td>G1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>003</td>
<td>G1</td>
<td>G1</td>
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<tr>
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<td>4</td>
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<td>G3</td>
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<td>10</td>
<td>010</td>
<td>G3</td>
<td>G3</td>
<td>G3</td>
</tr>
</tbody>
</table>

Analyses of prostate grade before 2014 based solely on the grade field is not recommended.

## Current Conversion

<table>
<thead>
<tr>
<th>Code</th>
<th>Gleason’s score</th>
<th>Terminology</th>
<th>Histologic Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2, 3, 4</td>
<td>Well Differentiated</td>
<td>I</td>
</tr>
<tr>
<td>2</td>
<td>5, 6, 7, 8</td>
<td>Moderately Differentiated</td>
<td>II</td>
</tr>
<tr>
<td>3</td>
<td>9, 10</td>
<td>Poorly Differentiated</td>
<td>III</td>
</tr>
</tbody>
</table>

**Current Conversion**

**FCDS DAM Update**

**AJCC 7th edition**

**2014 Proposed Conversion**
CLOSING REMARKS

- FCDS has already begun utilizing edits for [OBS] codes.
- FCDS will not allow any facility to use proposed ICD-0 Codes.
- DO NOT USE GRADE CODING GUIDELINES UNTIL APPROVED.

- > 20 critical cancer registry reference manuals, tables, algorithms, and coding instruction documents to be updated – IMPACT ???
- How to schedule and coordinate updates to multiple references
- All Staff Must Use - current manuals, versions, updates, etc.
- Please Do Not Use Outdated Materials - put them away
- MANAGERS/FAA: Please share QC feedback and QC Review Findings and any other Field Coordinator and Quality Review corrections and comments with their staff - especially when new rules and tools and manuals or manual updates are introduced.

2013 SEER Rx and Heme/Lymph Database Updates

Background
Rules and Instructions
Tips and Tools
Gema G. Midence, MBA, CTR
Steven Peace, CTR
Florida Cancer Data System Annual Meeting
Friday, July 26, 2013
Sunrise, Florida

History and Background
Information for Cancer Registrars

SEER*Rx

Summary of Changes in 2013

- Total number of drugs listed in SEER*RX: 1825
- Total number of Regimens listed in SEER*RX: 853
- Number of drugs added: 12
- Number of drugs modified: 71
- Number of regimens added: 3
- Number of regimens deleted: 1 (duplicate)
- Number of regimens modified: 255
Prior to 2013, targeted therapies that invoke an immune response, such as Herceptin, had been coded as chemotherapy.

Effective with cases diagnosed January 1, 2013 and forward these therapies are classified as biological response modifiers.

Coding instructions for these changes have been added to the remarks field for the applicable drugs in the SEER*RX Interactive Drug Database.
Information for Cancer Registrars

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Mechanism</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Docetaxel</td>
<td>Microtubule-stabilizing</td>
<td>Chemotherapy</td>
</tr>
<tr>
<td>Paclitaxel</td>
<td>Microtubule-stabilizing</td>
<td>Chemotherapy</td>
</tr>
<tr>
<td>Gemcitabine</td>
<td>DNA replication inhibition</td>
<td>Chemotherapy</td>
</tr>
<tr>
<td>Topotecan</td>
<td>Topoisomerase I inhibition</td>
<td>Chemotherapy</td>
</tr>
</tbody>
</table>

For more information, please visit the SEER*Rx Interactive Antineoplastic Drugs Database.
Information for Cancer Registrars

What’s In The Manual/Database?

<table>
<thead>
<tr>
<th>Manual</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Neoplasm Definition</td>
</tr>
<tr>
<td>Reportable Rules</td>
<td>Neoplasm Synonyms</td>
</tr>
<tr>
<td>Multiple Primary</td>
<td>MP Calculator</td>
</tr>
<tr>
<td>Site Coding Rules</td>
<td>Diagnostic Method(s)</td>
</tr>
<tr>
<td>Histology Rules</td>
<td>Genetic Tests</td>
</tr>
<tr>
<td>Grade Coding Rules</td>
<td>Immunophenotype</td>
</tr>
<tr>
<td>Glossary</td>
<td>Treatment</td>
</tr>
<tr>
<td>Appendices (A-F)</td>
<td>Transformation</td>
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<tr>
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<td>Abstractor Notes</td>
</tr>
<tr>
<td></td>
<td>ICD-O/ICD-9/ICD-10 Codes</td>
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</tbody>
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Hematopoietic Database
WHAT'S NEW IN CANCER CARE

FCDS Annual Meeting
July 26, 2013
Sunrise, Florida

Steven Peace, CTR
FCDS Data Quality Staff

Prevention   Detection   Treatment   Recovery   Palliation

WHAT’S NEW IN CANCER CARE?

- Targeting At Risk and High Risk Populations
  - Cancer Screening Guidelines
  - New Screening Methods
- Profiling Individual and Tumor Characteristics
  - Prognostic Indicators
  - Molecular Testing
  - Genetic Testing
  - Staging Factors
- Targeting Treatment
  - Patient/Tumor Profile
  - Treatment Guidelines
  - Quality of Life and End of Life Care
- New Methods for Drug Delivery

Source: hetdex.com
**CANCER SCREENING GUIDELINES - LUNG**

- August 2011 - National Lung Screening Trial (NLST) Results
- Screening with low-dose spiral CT compared to CXR reduced lung cancer deaths among older heavy smokers by 20%.
- Improved detection of lung cancer at earlier stages is key to increased survival and improved mortality due to lung cancer.
- Weigh Benefits/Risk of lung cancer screening using CT scan
- Recommend Screening in High Risk Population:
  - Current/Former Smoker
  - Age 55-74 Years
  - Smoking History of at least 20-30 pack-years (varies by organization)
  - No personal history of lung cancer
- **Frequency of Screening** not included in All Recommendations
  - Annual
  - Once Every 3 Years
  - Other

---

**Endorsement/Adoption of Guideline**
- American Cancer Society (ACS)
- American Lung Association (ALA)
- American College of Chest Physicians (ACCP)
- American Association for Thoracic Surgery (AATS)
- ASCO/NCCN Clinical Practice Guidelines (ASCO/NCCN)

**Pending Endorsement**
- United States Preventative Services Task Force
  - 2004 - Last update to USPS TF Lung Cancer Screening

---

**American Lung Association Recommendations**

- The best way to prevent lung cancer caused by tobacco use is to never start smoking or to quit smoking.
- Low-dose CT screening should be recommended for those people who meet NLST criteria:
  - Current or former smokers aged 55 to 74 years
  - A smoking history of at least 30 pack-years
  - No history of lung cancer
- Individuals should not receive a chest X-ray for lung cancer screening
- Low-dose CT screening should NOT be recommended for everyone
- Patients should be referred to a facility that uses “best practices” for CT screening

The complete report can be found at www.Lung.org.
ALA Developing an Educational Portfolio for Patients to Explain:

- The difference between a screening process and a diagnostic test
- Cancer screening is testing for cancer before there are any symptoms
- The benefits, risks and costs (emotional, physical and economic)
- Not all lung cancers will be detected through use of low-dose CT scanning

ALA issued a Call to Action for Hospitals and Screening Centers to:

- Establish ethical policies for advertising/promoting lung cancer screening services
- Develop educational materials to assist patients in having thoughtful discussions between patients and physicians regarding lung cancer screening
- Provide lung cancer screening services with access to multidisciplinary teams that can deliver the needed follow-up for evaluation of nodules.

CANCER SCREENING GUIDELINES - PROSTATE

- PSA screening in men under age 40 years is not recommended.
- Routine screening in men between ages 40 to 54 years at average risk is not recommended.
- For men ages 55 to 69 years, the decision to undergo PSA screening involves weighing the benefits of preventing prostate cancer mortality in 1 man for every 1,000 men screened over a decade against the known potential harms associated with screening and treatment. For this reason, shared decision-making is recommended for men age 55 to 69 years that are considering PSA screening, and proceeding based on patients’ values and preferences.
- To reduce the harms of screening, a routine screening interval of two years or more may be preferred over annual screening in those men who have participated in shared decision-making and decided on screening. As compared to annual screening, it is expected that screening intervals of two years preserve the majority of the benefits and reduce over diagnosis and false positives.
- Routine PSA screening is not recommended in men over age 70 or any man with less than a 10-15 year life expectancy.

What do the guidelines actually mean?

- Men of any age should not be routinely screened using PSA until evidence demonstrates mortality benefit of screening.
- Men ages 55 to 69 are urged to talk with their doctors about benefits and harms of testing and treatment.
- The best available evidence suggests that following these guidelines will lead to an improved benefit-to-harm ratio.
- What will this mean for cancer registry programs?
- What will this mean for cancer treatment centers?
CANCER SCREENING GUIDELINES - PROSTATE

- Endorsement/Adoption of Guideline
  + American Cancer Society (ACS)
  + American College of Physicians (ACP)
  + American Urological Association (AUA)
  + American Society for Radiation Oncology (ASTRO)
  + ASCO/NCCN Clinical Practice Guidelines (ASCO/NCCN)
  + United States Preventative Services Task Force (USPSTF)

NEW CANCER SCREENING METHODS

- Need to Track Radiation Exposures from Screening
- Need to Track Radiation Exposure from non-screen CTs
- Screening Risk from Radiation Exposure Hypothesis Testing
NEW TREATMENT DELIVERY METHODS

- Transition from infusion chemotherapy to oral administration

- New Inhalable chemotherapeutic agents using “nanostructured lipid nanocarriers” can transport antineoplastic agents at full strength directly into lungs or other organs – highly efficient.

- Nanoparticles also carry small interfering RNA (siRNA) molecules which helps control and repress certain genes to eliminate “pump” resistance (when tumor cells actively expel chemo agent(s) before the chemo can work) and “non-pump” resistance, which keeps cancer cell from dying.

- MRI-Guided Focused/Concentrated Ultrasound Therapy

NEW TREATMENT DELIVERY METHODS

- Photo-Dynamic Therapy (PDT)
  - Approved for airway malignancy, Barrett’s esophagus with high-grade dysplasia and non-melanoma skin cancers
  - Investigational for high-grade glioma, oral and laryngeal neoplasms, inoperable cholangiocarcinoma, and mesothelioma

- New Embolization Techniques
  - Code as Chemo or Radiation plus Other Therapy
  - Trans-Arterial Chemo Embolization (TACE) – direct administration of chemo into liver or other organ then embolization of artery
  - Drug Eluting Bead Therapy – administration of beads impregnated with chemo agent(s) through catheter with timed release of agent(s)
  - Yttrium-90 Microsphere Therapy – administration of spheres with low levels of radio-isotope Yttrium-90 attached – direct radiation to liver
  - Code as brachytherapy not radio-isotope per CoC
NEW TREATMENT DELIVERY METHODS

- HIPEC Chemotherapy – Heated Intra-peritoneal Chemotherapy
  - Chemotherapy solution heated to 107.6 degrees before administration
  - Chemotherapy solution kept at 107.6 degrees and recirculated throughout peritoneal cavity for at least two hours by going through a heating chamber

- Proton Therapy Increases Precision and Reduces Side Effects
  - Focusing not only on direct treatment to tumor burden but also reducing side effects from treatment and collateral tissue damage
  - Also focusing on long-term /secondary effects from treatment(s)

FOCUS AREAS IN CANCER RESEARCH

- Cancer Screening Risks and Benefits
- No Two Tumors Are Alike
- Precision Medicine – Personalized Medicine
- Targeting Molecular Pathways
- Targeting Genetic Alterations
- FDA and New Drug Approvals
- Management of Clinical Trials
- Overcoming Treatment Resistance
- Quality of Life and Survivorship Issues
- End of Life Care
## FDA APPROVALS OF ANTI-CANCER AGENTS

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Trade Name</th>
<th>Indications</th>
<th>Date of Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everolimus</td>
<td>Afinitor</td>
<td>For treatment of adult patients with advanced renal cell carcinoma who are not candidates for surgery or radiation and for patients whose cancer has progressed despite prior treatment.</td>
<td>January 31, 2012</td>
</tr>
<tr>
<td>Erlotinib</td>
<td>Tarceva</td>
<td>For treatment of patients with non-small cell lung cancer with an epidermal growth factor receptor (EGFR) mutation.</td>
<td>April 29, 2012</td>
</tr>
<tr>
<td>Trastuzumab</td>
<td>Herceptin</td>
<td>For adjuvant therapy of HER2-overexpressing breast cancer in patients whose disease was manifest at initial diagnosis.</td>
<td>November 19, 2012</td>
</tr>
</tbody>
</table>

## MAJOR CLINICAL ADVANCES IN YEAR 2012

- **Breast Cancer**
  - Chemo - Everolimus (Afinitor) for hormone-receptor + breast
  - Chemo - Trastuzumab-DM1 for HER2-positive metastatic breast
  - BRM - Pertuzumab (Perjeta) for HER2-positive metastatic breast

- **Lung Cancer**
  - Combination Chemo - Carboplatin and Pemetrexed for non-small cell lung cancer
MAJOR CLINICAL ADVANCES IN YEAR 2012

**Prostate Cancer**
- Hormone - Enzalutamide (Xtandi) for late stage prostate cancer

**Esophageal Cancer**
- Neoadjuvant chemo plus XRT then surgery for esophagus and gastroesophageal junction tumors

**Multiple Myeloma**
- BRM - Lenalidomide (Revlimid) maintenance delays relapse after stem cell transplant
- BRM Agents for MM – Thalidomide, Velcade, Kyprolis, Pomalyst

**Soft Tissue Sarcoma**
- Chemo - Pazopanib (Votrient) for soft tissue sarcoma – 1st new drug in decades for soft tissue sarcoma

**Thyroid Cancer**
- Chemo - Cabozantinib (Cometriq) in medullary thyroid cancer

**Colorectal Cancer**
- Chemo - Regorafenib (Stivarga) in metastatic colorectal cancer

**Ovarian Cancer**
- BRM - Bevacizumab (Avastin) in recurrent ovarian cancer
MAJOR CLINICAL ADVANCES IN YEAR 2012

Colorectal Cancer Screening
+ Flexible sigmoidoscopy reduces colorectal cancer incidence and deaths – where does it fit into screening paradigm?
+ Flexible sigmoidoscopy results are comparable to colonoscopy

Factors increase risk of death in elderly chemo population
+ Geriatric assessment for patients > 70 yrs of age
+ Advanced disease
+ Low nutritional assessment score
+ Poor mobility

Chemo-induced Nausea and Vomiting
+ Ancillary - Olanzapine (Zyprexa) for breakthrough nausea/vomiting

Predicting risk for adverse effects of chemo in elderly
+ New model introduced scoring system and risk-stratification
+ Low-Risk / Intermediate-Risk / High-Risk

Chemo-induced Peripheral Neuropathy
+ Ancillary - Duloxetine (Cymbalta) for alleviating pain from chemo-induced neuropathy
WHY CLINICAL GUIDELINES?

GUIDELINES

Adapting Quality Care through Clinical Guidelines

Clinical guidelines are a cornerstone of high-quality cancer care, helping doctors to provide the most effective and efficient care possible. Over the past year, ASCO has focused on several key topics, including:

- Integration of palliative care into standard cancer care
- Clinical advances in hematology and oncology

- Development of ACR guidelines that are typically used as a systematic, objective index of medical opinion

The past year has seen a growing emphasis on clinical guidelines, driven in part by the American Society of Clinical Oncology (ASCO) and the American Society for Clinical Oncology (ASCO). This emphasis on clinical guidelines has resulted in a number of high-quality resources for healthcare providers.

QUALITY INDICATORS

- Risk Stratification TX Early Stage Bladder Cancer (example):
  - Low-Risk Group: Ta Low Grade/Low Volume Non-Muscle Invasive Bladder Cancer — single dose Intravesical Chemotherapy using Epirubicin or Mitomycin
  - High-Risk Group: Ta High Grade/High Volume Non-Muscle Invasive and T1 Bladder Cancer — Intravesical BCG (Bacillus Calmette-Guerin — Tuberculosis)

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