**CENTRAL REGISTRY DAY**

**2016 Implementation Guidelines** – are on the NAACCR website, [www.naaccr.org/](http://www.naaccr.org/).

**2016 New Data Items** – TS Clinical/TS pathologic – SEER, to get quality data and better information for researchers. TS Summary – NPCR/CoC, to get most definitive/accurate tumor size, best available information before therapy, priority is given to pathology resection.

Two New Metastatic Fields, Distant LN and Other have been added to Bone, Brain, Liver, and Lung.

**Derived NPCR Stage Group** – Clinical & Path: Purpose is to store “c” and “p” stage groups derived, relevant biomarkers, and prognostic indicators.

**Derived SEER Stage Group** – Purpose is to store the “best” TNM values based on “c” and “p” and timing of treatment resulting in a combined stage group.

**Changed Data Items** – Addition of “c” and “p” to TNM. TNM Path Staged by [930] & TNM Clinical Staged by [990]. Additional codes were added, characters changed from 1 to 2 digits.

**2016 SSF’s** – Look for spreadsheet on SEER website <http://seer.cancer.gov/tools/staging>.

**SEER\*RSA (Registrars Training Assistant)** – CS & TNM staging available on SEER\*RSA.

**NAACCR ICD-O-3 Implementation Workgroup** – New histology codes are planned for 1/1/2017. New behavior (/3) codes are being added to some existing codes.

**NAACCR AJCC Data Item Consolidation Task Force** is creating a summary of registry consolidation practices. Discussion on consolidation rules will resume when TNM data are available from AJCC.

Sign up for a MyNAACCR account.

Subscribe to SEER Registrar Newslist

Follow SEER on Twitter @ NCI Cancer Stats and NAACCR @NAACCR.

**Death Clearance** – There is a NAACCR Death Clearance Manual online with tumor comparison guidelines. These mapping guidelines are for diagnoses within 5 years of death date. Keep in mind these guidelines are for Death Clearance ONLY. MCSS should have a DC Mapping Table using the NAACCR DC Mapping Table guidelines. Document on DC Follow-Back Form: “Match per NAACCR Death Clearance Manual Guidelines”. Hospital Death Follow-Back letters are sent directly to the facility for follow-back (HIM Dept). Could MCSS have 1 staff person do DC Follow-Back with letters to facilities/MDs and matching cases themselves? Perhaps Ashley?

MDO’s (Medical Doctor Only case) – Proper use of MDO: Example - DC states cancer, MD states patient had cancer, have an approximate diagnosis date. Reporting source = 4. No stage/treatment. I think these are the DCO’s that we identify.

**Ambiguous terms on a Death Certificate** = NR. Example - DC = Cancer, Hospital = NR due to ambiguous terminology, DC Follow-Back = NR. DC = lung cancer, MD states lung cancer, entered hospice, DC Follow-Back = MDO.

**TNM Consolidation** (Jim Hofferkamp) – TNM = classification; Stage = category. **READ** the General Rules in AJCC Manual!! No “c”Tis. Tis is ALWAYS a **“p”**Tis, even on biopsy only and “c”N0 is entered into path staging as “c”N0.

\*\*\*Standard setters will NOT look at staging prior to 2016 cases. Central Registries need to decide how to handle these cases. Pre-2016 cases coming in after the conversion, do we want to collect the “c” & “p” edits or leave them as they are?

**Jo Bitker suggestion – New reference date with the New software program. I agree – CFM.**

**2016 Issues in TNM Consolidation** (Steve Peace) – Methodology for consolidating stage: 1) Basic assumptions, 2) Assisted consolidation - take known value over unknown and take analytic over non-analytic – these are now in question, 3) Automated consolidation, 4) Focus on analytic records, 5) Concept of a “Golden Reporter” – most often associated with CoC approved facilities – this concept is in question, 6) Relationship of stage to other items, and 7) Consolidated case still must pass EDITS. 2016 changes have created chaos for all. The 2016 SEER Coding Manual – Section V tried to define instructions and rules. Text documentation is more critical than ever. Remember – Text, Text, Text!!! What about Blanks and X’s? There is no definition for Blank in the AJCC Manual. Central Registries will treat Blanks and X’s the same. Prioritizing and decision-making is changing. Anatomic stage is becoming less important with biological and genetic factors impacting stage.

**Moonshot Initiative** – President Obama assigned Vice President Biden to lead a new National “Moonshot” Cancer Initiative to eliminate cancer as we know it. A Cancer Moonshot Task Force has been established to focus on making the most of Federal investments, targeted initiatives, private sector efforts from industry and philanthropy, patient engagement initiatives, and other mechanisms to support cancer research and enable progress in treatment and care. There are no registrars on this taskforce. The NCI has launched an online engagement platform to submit research ideas for the cancer Moonshot initiative at <http://CancerResearchIdeas.cancer.gov/> . Any member of the public is encouraged to submit their ideas for reducing the incidence of cancer and developing better ways to prevent, treat and cure all types of cancer.

**Central Registry QA Activities – What’s in Your Data?** (Winny Roshala) – Focus your activities, pick something not too broad to audit. Seek inspiration for the QA activity & share your findings. 2013 PSA Audit arose from a SEER concern regarding PSA value coding. The audit showed rounding was an issue: 13.9 coded as 140 rather than 139; 4.6 coded to 050 instead of

046; 12.18 coded to 121 instead of 122; 20.76 coded to 207 instead of 208; 10 coded to 100; 8 coded to 008 instead of 080, and so forth. As a result of this audit, prostate PSA coding guideline document was developed and is available on the SEER website. All coded values need

corresponding text documentation. Skin Melanoma Audit – CS SSF1 (Breslow’s depth of invasion) was often times miscoded. As a result of this audit a guideline document was created. Guidelines are also available on the Cancer Registry of Greater California website, <http://crgc-cancer.org>. A study of male breast cancer cases from 2013-2014 was undertaken to determine if they are really males. There were 26 total errors out of 215 cases for the 2 years. Male breast cancer is treated differently than female and is usually more aggressive.

**UICC vs AJCC** (Jennifer Ruhl) – SEER will be following the UICC (International Union Against Cancer) rules. NPCR strictly uses the AJCC manual. Differences in the two Staging Manuals were discussed. In the AJCC Manual, testis does not have a clinical T value. cTX is the only valid clinical T value. In summary, UICC and AJCC have some documented differences in their manuals. The differences between the two are minor. The differences documented in the presentation can be found at: SEER\*RSA (by schema/chapter) and in comparison document, Comparison of UICC 7th Edition and AJCC 7th Edition (posted on SEER website link).

**2016 TNM Staging for SEER** (Nicki Shluster) – All standard setters are moving to TNM for diagnosis year 2016. “Parent” categories are not always defined by AJCC, i.e. Colon & Rectum (T4), Small Intestine (T1). For CoC and NPCR, if only available information is a parent code not found in the AJCC manual, capture value in text, set field to cX or pX code. SEER\*DMS (MCSS’ new software system) will convert these to X on export to groups other than SEER. NPCR is accepting blanks, 88’s or 99’s for DCO case. For SEER, DCO = TNM 88’s, Stage Group 88. Redundant SSF’s: 988 should be coded for Prostate – SSF3 and Retinoblastoma SSF1 – pT; Appendix, Carcinoid Appendix, Colon, Rectum, NET Colon, NET Rectum, Small Intestine SSF2 – cN; Esophagus, Esophagus GE Junction, Stomach, NET Stomach SSF1 – cN; Melanoma Skin, Merkel Cell SSF3 – cN; Bile Ducts Intrahepatic SSF10 – T4. For Peritoneum and Peritoneum Female Genital SSF25 will be discontinued, sex will be used as discriminator instead. Note: SEER Summary Stage 2000 should be manually assigned for all cases which includes schemas with no TNM chapter and cases with TNM chapter but primary site/histology is not TNM defined.

A NAACCR committee is working on consolidation guidelines. A SEER representative is on the committee and SEER will follow guidelines developed by this committee.

**Defining Data Relationships** (Jennifer Ruhl) – By understanding data relationships, you will be able to avoid many of the edits. Review AJCC chapters carefully to determine the valid values for TNM and stage group, example 1: Lung, TX, T0, T1, T1a, T1b, T2, T2a, T2b, T3, T4; Example 2: Colon, TX, T0, T1, T2, T3, T4, T4a, T4b. AJCC chapters with no in situ are coded 88 for TNM. TNM on DCO cases – clinical and pathologic TNM are 88’s, clinical and pathologic stage group are 88, descriptors are 0 and staged by is 88. TNM is not defined for lymphomas and MUST be 88. Ill-defined schemas (included digestive other, trachea, etc.) are TNM 88’s, descriptor 0 and

stage group 88. The ill-defined cases would be SSS only. There is no Tis for prostate. You can assign behavior /2 to prostate, however, TNM data elements would be recorded as 88’s. NPCR

uses Tumor Size Summary. If TS = 000, then the T value must = 0 (T0). Melanoma – if no mention of ulceration, assume negative. In Head & Neck SSF1, if you have both a “c” and “p” size of LN, use the pathologic size. This applies to ALL SSFs.

**HOSPITAL REGISTRY DAY** – 4/10/16

**SEER Tools & Updates for Cancer Registrars** (Peggy Adamo) – The SEER Coding Manual, Section V: Stage of Disease at Diagnosis is available for download on the SEER website. Cancer registrar online training is available through the SEER website <https://seer.cancer.gov> . New registrars should sign up for the SEER listserv through the SEER website. 2017 Solid Tumor Rules – What is Planned? Current multiple primary rules will be renamed to Solid Tumor Rules in 2017 and should be available before 1/1/2017. The Solid Tumor Rules database should be out shortly after the AJCC rules are available. SSS2017 Manual is based on the AJCC TNM 8th Edition and will be for cases diagnosed 1/1/2017 forward. Applicable TNM cases will have derived SSS2017. Cases that do not have TNM codes will need to be manually coded in SSS2017. 2017 New Data Items – there is a rumor that more biomarkers will be added. The FORDS Manual is being revised for 2017 and there may be 94+ new items with the majority being treatment items. SEER Schema Collapse – Jennifer Ruhl is in charge of this. There are 153 schemas in SEER\*RSA. These may be collapsed effective with 1/1/2017. Schemas eligible for collapse include schemas where the TNM chapter groups them as one, e.g. Lip and Oral Cavity, which includes 11 schemas. Examples of schema collapse:

 2016 Schemas 2017 Schema

 Pancreas Body Tail

 Pancreas Head Pancreas

 Pancreas Other­­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Merkel Cell Penis

 Merkel Cell Scrotum

 Merkel Cell Skin Merkel Cell Carcinoma

 Merkel Cell Vulva\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Lip Lower

 Lip Other Lip

 Lip Upper\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Treatment Modalities for Lung Cancer** (SuAnn McFadden) – 85-90% of all lung cancers are non-small cell, are linked to smoking history, usually arise in the bronchi in center of lung, often invades locally and are less likely to metastasize. Non-small cell lung cancer may be treated with surgery which provides the best chance for cure, radiation – either alone or in combination with surgery and/or chemotherapy given either before or after surgery, or palliative radiation. Chemotherapy may be the main treatment for advanced non-small cell lung cancers and targeted therapies are generally for advanced disease. Immunotherapy may also be a treatment choice for non-small cell lung cancer. Small cell carcinoma of the lung is almost

always associated with smoking, usually in centrally located bronchi and spread quickly and widely. There has been no change in treatment of small cell lung cancer in 20 years. Limited stage disease is treated with combination chemotherapy and radiation therapy, possibly prophylactic cranial radiation or palliative radiation, and if early stage with no lymph node involvement, surgery. Extensive stage is treated with chemotherapy only with or without prophylactic cranial radiation and/or consolidation radiation to the chest. Carcinoid tumors of the lung make up <5% of all lung cancers, are slow growing and are generally cured with surgery. Radon gas exposure raises the risk of developing lung cancer and 12% of lung cancer is linked to radon exposure. Minnesota and the Dakotas have >4 pCi/L which is in the high category according to the Generalized Geologic Radon Potential of the United States based on a US Geological Survey. Know your risk! Radon gas can be detected with simple, inexpensive test kits.

**Neuroendocrine Tumors** (Steve Peace) – Neuroendocrine tumors (NETS) are often referred to by different names. Some NETS are benign tumors but some are highly malignant. Neuroendocrine tumors known widely by another name are: Merkel cell carcinoma, medullary thyroid carcinoma, carcinoid tumor (low-grade NET), pheochromocytoma/paraganglioma, panNET – pancreatic neuroendocrine tumor, poorly differentiated large cell carcinoma (high-grade NET), poorly differentiated small cell carcinoma (high-grade NET), and ACTH-dependent or ACTH-independent Cushing syndrome. NETS that are NOT this type of NET are neuroectodermal tumors which include CNS PNET (primitive neuroectodermal tumor of CNS), PPNET (peripheral primitive neuroectodermal tumor – Ewings sarcoma), and DNET (dysembryoplastic neuroepithelial tumor). Pancreatic tumors that may be missed by registrars as reportable include:

ICD-O-3 Description

 8150/3 Cystic Pancreatic Endocrine Neoplasm (CPEN)

 8453/2 Intraductal Papillary Mucinous Neoplasm (IPNM)

 8503/2 Intraductal Tubule-Papillary Neoplasm (ITPN)

 8470/2 Mucinous Cystic Neoplasm (MCN)

 8246/3 Neuroendocrine Carcinoma

 8240/3 Neuroendocrine Tumor, Grade 1 (NET GR1)

 8249/3 Neuroendocrine Tumor, Grade 2 (NET GR2)

 8452/3 Solid Pseudo-Papillary Neoplasm (SPN)

This is not an inclusive list. A more complete list is located in the SEER Coding & Staging Manual.

High grade tumors have mitotic rates >2, increased Ki-67 and tend to have more endocrine symptoms. For PNET, if not mitoses, pathologist will often call it a “tumor”. Frequently grade 1 and grade 2 tumors are asymptomatic. Most NETS occur in the gut and are low grade.

Staging GI Tract NET Neoplasms – Use specific TNM Chapter. If there is no specific TNM NET Chapter, use the site/organ/organ system of origin to stage (lung, thyroid, prostate, etc.).

Staging NET Neoplasms – AJCC does not include a Tis category for NET of the colon. The assignment of the T category codes for NETs of the colon/rectum is based on tumor size and extension. Ignore intraluminal extension to adjacent segment(s) of colon/rectum or to the ileum from cecum; intramucosal, code depth of invasion or extra-colonic spread as indicated. Nodes are either positive or negative (N0 or N1). Mets are either present or absent (M0 or M1). Site Specific Factors for NET Neoplasms – Mitotic Count - # mitosis/10HPF: record mitotic count to the nearest tenth (3/10 HPF = 030). Serum CgA (Chromogranin A lab value) – record to the nearest nanogram/milliliter (ng/ml) the highest CgA documented prior to treatment (400 ng/ml = 400). Urinary 5-HIAA (5-Hydroxyinidoleacetic Acid lab value) – record to the nearest milligram (mg) the highest 5-HIAA lab value prior to treatment (550 mg over 24 hours = 550). NCCN treatment guidelines are available for NETs.

**Summary Stage 2000 – When Simple is not so Simple** (Patrick Nicolin) – “SEER Summary Stage 2000 is the most basic way of categorizing how far a cancer has spread from its point of origin” – but basic does not mean simple. Also, SSS2000 does not always coincide with the AJCC Staging Manual – LOOK at the manual! SSS is a combination of the clinical and pathologic information of the extent of the disease. Combining clinical and pathologic information is much like CS, except: no tumor size, no evaluation codes, no separate coding of extension and lymph nodes, and if distant stage, regional coding is ignored. General guidelines for SSS2000 – staging window is within 4 months of diagnosis or completion of first course surgery, whichever is longer; information after systemic treatment or radiation therapy is okay as long as it is within the timeframe. If patient has neoadjuvant treatment and surgery with no residual, no lymph node involvement, use the “best” stage using clinical and pathologic information. In this case, use the most extensive extension, nodes, etc. and code the clinical stage. If clinically nodes were positive and no lymph nodes removed at surgery, code cN+ and ypN-. Site specific guidelines take precedence over general rules. Ambiguous terminology for SEER is identical to current CS ambiguous terminology and are involvement terms, not to be confused with reportability terms. Lymphoma staging in SSS2000 is limited to 1 – Localized, 5 – Regional, NOS and 7 – Distant. SSS2000 is used for 2015 and 2016 diagnosed cases.

**Results of Reliability Study SSFs & How to Improve Data Collection** (Annie Noone) –

**Liver & Biliary Cancer Treatment Choices** (Louanne Currence) – The liver is the largest internal organ with 39,230 new cases of liver cancer in the USA in 2016 and a male to female ratio of 3:1. 5-25% of liver cancer cases are eligible for surgery. 5-year survival rate with surgery is 25-50%. HCC recurs in tansplanted liver within in 6-24 months. The liver is the 2nd most transplanted organ in the US. Livers regenerate in <4 weeks. Cost of liver transplant in US is $350,000 comapred to $60,000 in India. India has hospitals dedicated to liver transplants. Patient must stay at least 2 months post-op. Other treatment choices other than surgery and/or

transplant are: Irreversible electroporation (IRE, NanoKnife) = non-thermal cell destruction - code as 90; Ablation using cryoablation (13), percutaneous alcohol injection (15), microwave/RFA (16) and other ablation techniques. Non-surgery directed treatment include arterially directed therapies: TAE (transarterial bland embolization) or TACE (transarterial chemoembolization) using Doxorubicin or Cisplatin, or radioembolization (yttrium-90). Chemotherapy may be given or immunotherapy with Avastin/Bevacizumab. Radiation may be given via selective internal RT, TheraSphere, Microsphere, SIRSphere, microscopic glass spheres bonded to yttrium-90 (code to regional brachy, NOS, not to 60). Stereotactic body radiotherapy (SBRT) may be given by the Linac accelerator (photons) – code as 42 Linac radiosurgery, or Proton beam aka heavy-charged-particle – code as 41 Stereotactic NOS. Surgical treatment for Bile Duct cancers is similar to liver for intrahepatic bile ducts – segment to partial hepatectomy, transplant. Extrahepatic bile duct surgery includes Whipple procedure. Diagnostic laparoscopy should be the 1st step to help with staging and decide if curative surgery is possible. Non-surgical treatment includes bypass or stents – code as palliative treatment. Radiation therapy may include beam radiation, brachytherapy, hyperthermia, or radiosensitizers. Chemotherapy treatment includes Cisplatin & Gemzar, 5FU, Adriamycin. Drink Water, Surprise you Liver.

**Staging Resources** (Jennifer Ruhl) – Staging resources can be found at <http://seer.cancer.gov/tools/staging/> . The Registrar Staging Assistant (SEER\*RSA) website, <http://seer.cancer.gov/tools/staging/rsa.html> is intended for use by registrars to help with assigning TNM 7th edition stage and the coding of predictive and prognostic factors. Data on this site can be used to help SEER registrars determine the UICC TNM 7th edition stage and Collaborative Stage v.02.05.50 and code predictive and prognostic factors. Remember, SEER registries will be using UICC TNM 7th edition NOT AJCC TNM 7th edition. The 2016 SEER Program Coding and Staging Manual, Section V, Stage of Disease at Diagnosis includes a TNM schema mapping quick reference guide. SEER is allowing “blanks” in TNM, however, the stage group cannot be blank and needs to be 99. SSF obsolete codes have been taken out of SEER Staging Resources, Section V for 2016. UICC has learning modules at <http://www.uicc.org/resources/tnm> .

Remember, it is OK for AJCC and SSS to not match.

**SEER Quality Control Projects: Process, Recommendations, Lessons Learned** (Clara Lam) – SEER data are the most commonly used date to represent trends over time. There were 112 research grants ($87 million) funded in 2011-2012 where SEER data was critical to the grant. NCI study initiated to determine error rate in PSA in SEER data. The study found minimal error in SEER data due to implied decimal (~2%), identified other areas for improvement related to interpretation of coding rules. SEER is developing training for registrars and is publishing results of the study.

**Oncology Treatment: Current and Future** (Quyen Tran, PharmD) – Most recent changes to SEER\*RX coding instructions were in 2013 when several drugs changed classification from chemotherapy to immunotherapy. These drugs included Rituximab and Trastuzumab.

Chemotherapy is a drug treatment that kills fast growing cells in the body. These agents kill cancer cells by targeting the overall or specific phases of the cell cycle. Targeted chemotherapy acts on specific molecular agents in cancer cells. For instance, Olaparib, a PARP inhibitor, prevents cancer cells from repairing their DNA. Immunotherapy uses biological substances to stimulate or suppress the immune system to help the body fight cancer, infection, and other diseases. Immunotherapy is also known as biological response modulator (BRM). Tumor specific monoclonal antibodies can target HER2/neu, VEGF, EGFR, CD-20. In CD-20 it is not targeting a cancer protein but binds to immune cells that help the body’s immune cells combat the cancer cells. The FDA recently approved 14 oncology related drugs in 2015 and in 2016 the FDA has issued 6 approvals to expand indication of oncology agents. Dr Tran’s thoughts on future cancer therapy trends – 1) Tamilogene laherparepvec (Imlygic), classified as Immunotherapy, a genetically modified herpes simplex virus type 1 designed to replicate within tumors and produce an immunostimulatory protein (GM-CSF). Indications for its use would be local treatment of unresectable cutaneous, subcutaneous and nodal lesions in patients with melanoma recurrent after initial surgery. 2) Checkpoint inhibitors – checkpoints are molecules on immune cells that allow the body to recognize normal cells from foreign cells. Sometimes cancer cells have mechanisms to inactivate the checkpoint molecules, allowing them to go undetected by the immune system. Two main checkpoint proteins are PD-1 and CTLA-4. Both are receptors found on T-cells. When they bind to their respective ligands, they have negative regulatory effects on the T-cells. Checkpoint inhibitor agent Pembrolizumab targets PD-1 and is used in melanoma and NSCLC. Nivolumab targets PD-1 also and is used in melanoma, NSCLC, and renal cell carcinoma. Ipilimumab targets CTLA-4 and is used in melanoma.

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 MCSS