Arizona Cancer Registry (ACR Site-Specific and Historical Grade Information)

2018

- SEER Site Specific Coding Modules 2018
- SEER Site Specific Coding Modules 2016
- Historical information for coding Grade 2012-2015

ADHS

Source: Adamo M, Dickie L, Ruhl J. (January 2018). SEER Program Coding and Staging Manual 2018. National Cancer Institute, Bethesda, MD 20892. U.S. Department of Health and Human Services National Institutes of Health National Cancer Institute.

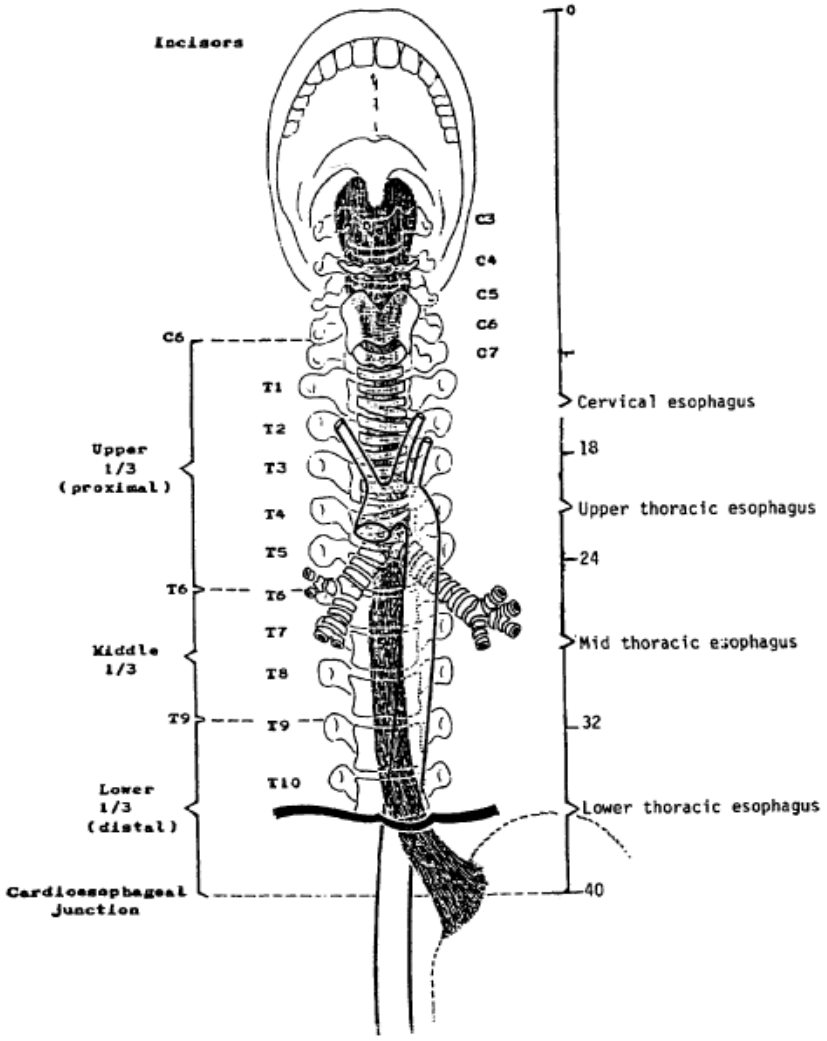
Coding Guidelines

Esophagus
C150-C155, C158-C159

Primary Site

There are two systems that divide the esophagus into three subsites. The first system divides the esophagus into the upper third, middle third, and lower third. The second system describes the subsites as the cervical esophagus, upper thoracic esophagus, mid thoracic esophagus, and lower thoracic (abdominal) esophagus. The subsites for these two different systems are not identical. Assign the ICD-O-3 topography code that describes the primary site documented in the medical record. See the following image for an illustration of both systems.

Measurements of the Esophagus
(From the Incisors to the Stomach)



First Course Treatment

Do **not** code proton pump inhibitors (PPI) as treatment

Do **not** code RFA for Barrett's esophagus as treatment

HALO 90 ultra radiofrequency ablation (RFA) of Barrett's esophagus is used to reduce progression of high-grade dysplasia to esophageal cancer. It is not used to treat esophageal cancer.

Coding Guidelines

Colon
C180–C189

The prognosis of patients with colon cancer is related to the degree of penetration of the tumor through the bowel wall, the presence or absence of nodal involvement, and the presence or absence of distant metastases.

Primary Site

Priority Order for Coding Primary Site

Use the information from reports in the following priority order to code the primary site when there is conflicting information:

Resected cases
- Operative report with surgeon's description
- Pathology report
- Imaging

Polypectomy or excision without resection
- Endoscopy report
- Pathology report

Subsites

Code the subsite with the most tumor when the tumor overlaps two subsites.
Code C188 when both subsites are equally involved.

Coding Guidelines

Rectosigmoid Junction
C199

Primary Site

A tumor is classified as **rectosigmoid** when differentiation between rectum and sigmoid is not possible.

A tumor is classified as **rectal** if

- lower margin lies less than 16 cm from the anal verge **or**
- any part of the tumor is located at least partly within the supply of the superior rectal artery

Anatomic Transition from Sigmoid to Rectum

In the sigmoid colon, approximately 12 to 15 cm from the dentate line, the tenia coli fuse to form the circumferential longitudinal muscle of the rectal wall.

The **rectum** is defined clinically as the distal large intestine commencing opposite the sacral promontory and ending at the anorectal ring, which corresponds to the proximal border of the puborectalis muscle palpable on digital rectal examination. It extends 16 cm from the anal verge.[1]

Glossary

Anal verge: The lower (distal) end of the anal canal, junction between the skin of the anal canal and the perianal skin.

Anorectal ring: Top (proximal end) of the anal canal.

Dentate line: An anatomic landmark located between the anal verge and the anorectal ring indicating where the rectum changes to the anal canal. Also called the pectinate line.

Tenia coli: (Plural: teniae coli). Any one of three longitudinal bands of smooth muscle in the colon. They extend from the cecum to the sigmoid colon. Each band is approximately 8 mm wide throughout most of the colon. The widths of the teniae increase in the sigmoid colon and eventually fuse into a covering of longitudinal muscle in the rectum.

[1] Wittekind C, Henson DE, Hutter RVP, Sobin LH, eds. TNM Supplement: A Commentary on Uniform Use. 2nd ed. New York, NY: Wiley-Liss; 2001.

Coding Guidelines

Lung
C340–C349

Primary Site

C340 Main bronchus
Carina
Hilum
Bronchus intermedius

C341 Upper lobe, lung
Lingula
Apex
Pancoast tumor

C342 Middle lobe, lung (Right lung only)

C343 Lower lobe, lung
Base

C348 Overlapping lesion of lung

C349 Lung, NOS
Bronchus, NOS

Laterality

Laterality must be coded for all subsites except carina.

Pancoast Tumor

Pancoast tumor is a lung cancer in the upper-most segment of the lung that directly invades the brachial plexus (nerve bundles) of the neck, causing pain. It is by definition malignant. Code the date of diagnosis from the imaging report when a Pancoast tumor is identified on imaging prior to biopsy.

Coding Guidelines

Bones, Joints, and Articular Cartilage C400–C419
Peripheral Nerves and Autonomic Nervous System C470–C479
Connective, Subcutaneous, and Other Soft Tissues C490–C499

(Except for M9750, 9760-9764, 9800-9820, 9826, 9831-9920, 9931-9992)

Laterality

Laterality is required for sites C400-C403, C413-C414, C471-C472, and C491-C492.

Coding Guidelines

Melanoma
C440-C449 with Histology 8720-8780

Reportability

As of cases diagnosed January 1, 2018, early or evolving melanoma of any type is **not** reportable. This includes both invasive and in situ melanomas; early or evolving are **not** reportable.

NAACCR Item #3817: Breslow Tumor Thickness

Maximum thickness (depth) in millimeters (mm)

[Based on information provided by the Seattle/Puget Sound SEER Registry]

Breslow tumor thickness is a four-character field. The field includes a decimal point. Depth/thickness values between 0.1 and 99.9 can be coded. The field requires one digit or character before the decimal point and one digit after the decimal point.

The field includes one place after the decimal point (Example: 12.3). The usual rounding rules apply to measurements with two digits after the decimal point: round 0-4 down and 5-9 up.

Examples

Thickness/Depth	Code
0.22 mm	0.2
.75 mm	0.8

When thickness/depth is recorded as a decimal point followed by one digit, code with a zero to the left before the decimal point.

Examples

Thickness/Depth	Code
.2 mm	0.2
.7 mm	0.7

When thickness/depth is greater than 0.0 and less than or equal to 0.1, code to 0.1.

Examples

Thickness/Depth	Code
Less than 0.1 mm	0.1
0.1 mm	0.1

When thickness/depth is stated as "at least" some measured value of 0.1 to 9.9, code A0.1-A9.9.

Examples

Thickness/Depth	Code
At least 0.2 mm	A0.2
At least 2.05 mm	A2.1
At least 8 mm	A8.0

When thickness/depth is stated as "at least" some measured value greater than 9.9 mm, code AX.0.

Examples

Thickness/Depth	Code
At least 10 mm	AX.0
At least 20.5 mm	AX.0

When thickness/depth is 100 mm or more, code XX.1.

Examples

Thickness/Depth	Code
100.1 mm	XX.1
10 cm	XX.1

Coding Guidelines

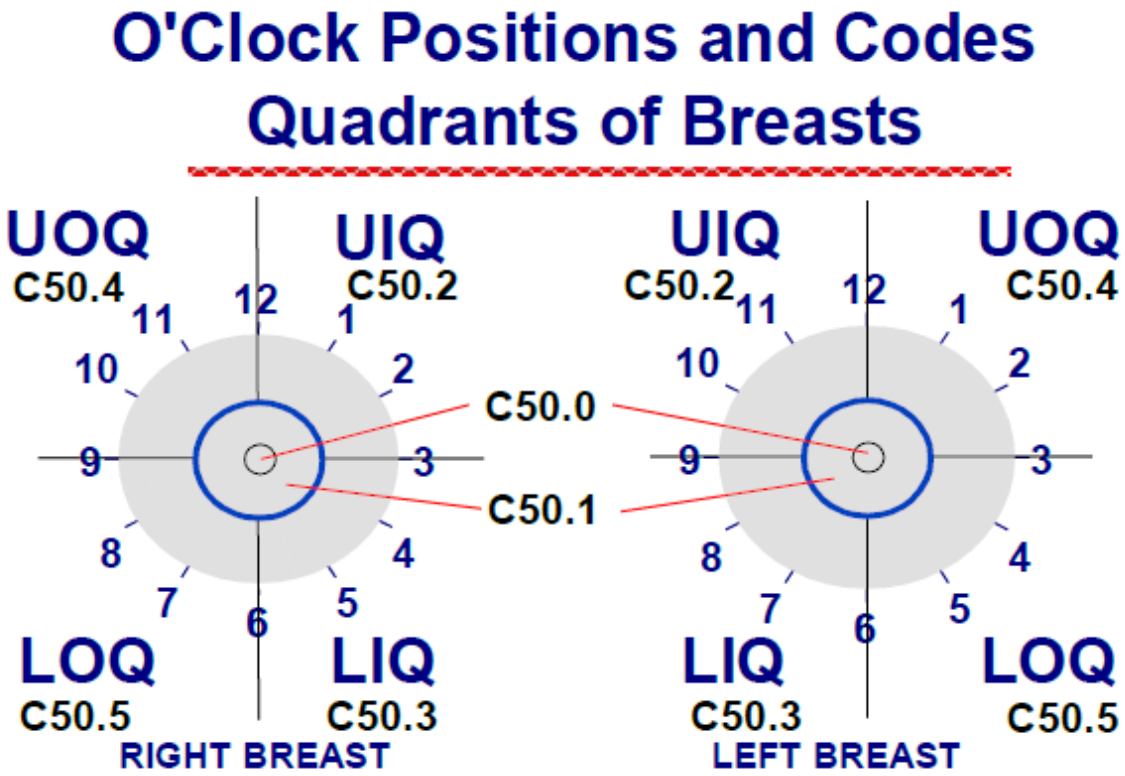
Breast
C500 -C509

Primary Site

See the Breast Solid Tumor Rules Equivalent Terms and Definitions for a list of terms used to describe location and their corresponding ICD-O-3 topography codes.

Additional Subsite Descriptors

The position of the tumor in the breast may be described as the positions on a clock



Coding Subsites

Use the information from reports in the following priority order to code a subsite when there is conflicting information:

1. Operative report
2. Pathology report
3. Mammogram, ultrasound (ultrasound becoming more frequently used)
4. Physical examination

Code the subsite with the **invasive** tumor when the pathology report identifies invasive tumor in one subsite and in situ tumor in a different subsite or subsites.

Code the specific quadrant for multifocal tumors all within one quadrant

- Do **not** code C509 (Breast, NOS) in this situation

Code the primary site to C508 when

- there is a single tumor in two or more subsites and the subsite in which the tumor originated is unknown
- there is a single tumor located at the 12, 3, 6, or 9 o'clock position on the breast

Code the primary site to C509 when there are multiple tumors (two or more) in at least two quadrants of the breast.

Laterality

Laterality must be coded for all subsites.

Breast primary with positive nodes and no breast mass found: Code laterality to the side with the positive nodes.

Coding Guidelines

Kidney
C649

Laterality

Laterality is required for C649.

Coding Guidelines

Renal Pelvis and Ureter
Renal Pelvis C659, Ureter C669

Laterality

Laterality is required for sites C65.9 and C66.9.

Coding Guidelines

Bladder
C670–C679

Reportability

Do **not** report bladder cancer based on **UroVysion** test results alone. Report the case if there is a physician statement of malignancy and/or the patient was treated for cancer.

Not reportable

Papillary urothelial neoplasms of low malignant potential (PUNLMPs)

The WHO classification categorizes "PUNLMP" as borderline, 8130/1. The definition is "a papillary urothelial tumor which resembles the exophytic urothelial papilloma, but shows increased cellular proliferation exceeding the thickness of normal urothelium." The histopathologic description is "the papillae of PUNLMP are discrete, slender and not fused and are lined by multilayered urothelium with minimal to absent cytologic atypia….Mitoses are rare and have a basal location."

Papilloma of bladder

The WHO classification categorizes "urothelial papilloma" as benign, 8120/0. The definition is "composed of a delicate fibrovascular core covered by urothelium indistinguishable from that of normal urothelium." The histopathologic description is "characterized by discrete papillary fronds with occasional branching…the epithelium lacks atypia…mitoses are absent to rare and, if present, are basal in location and not abnormal. The lesions are often small and occasionally show concomitant inverted growth pattern. Rarely, papilloma may show extensive involvement of the mucosa."

Primary Site

C670 Trigone of bladder
Base of bladder
Floor
Below interureteric ridge* (interureteric crest, or interureteric fold)

C671 Dome of bladder
Vertex
Roof
Vault

C672 Lateral wall of bladder
Right wall
Left wall
Lateral to ureteral orifice
Sidewall

C673 Anterior wall of bladder

C674 Posterior wall of bladder

C675 Bladder neck
Vesical neck
Internal urethral orifice
Internal urethral/uretero orifice

C676 Ureteric orifice
Just above ureteric orifice

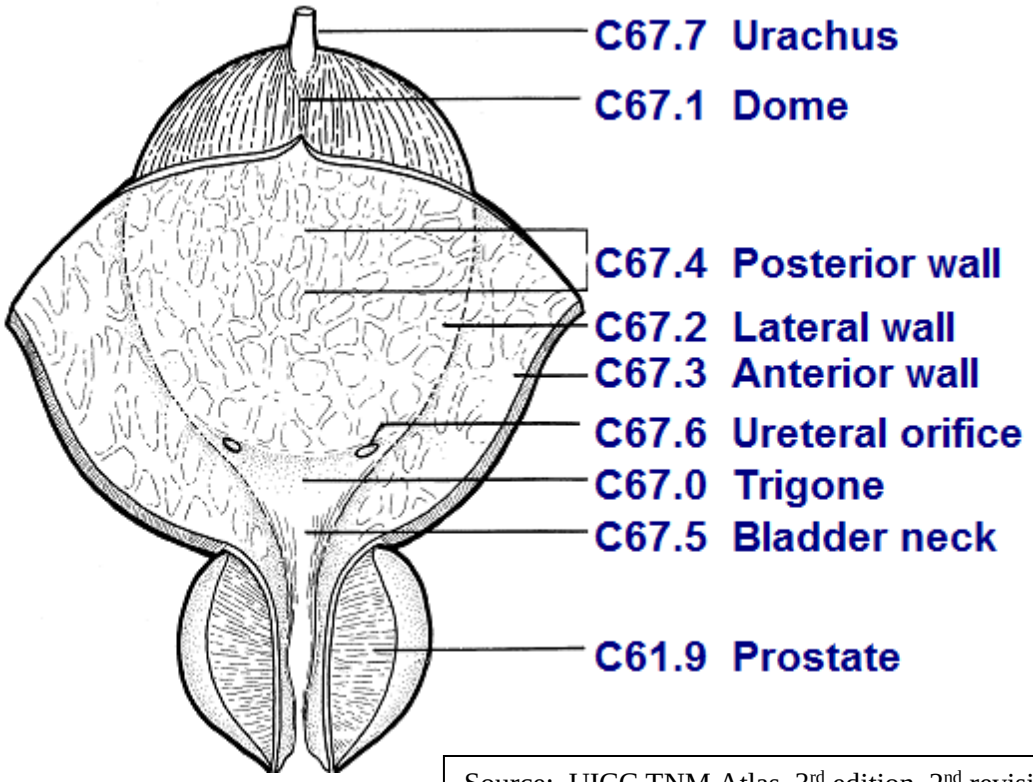
C677 Urachus
Mid umbilical ligament
Urachal remnant

C678 Overlapping lesion of bladder
Lateral-posterior wall (hyphen)
Fundus

C679 Bladder, NOS
Lateral posterior wall (no hyphen)

*The **interureteric ridge** is a fold of mucous membrane extending across the bladder between the ureteric orifices and forms one of the boundaries for the trigone of the bladder.

Bladder Anatomy and ICD-O-3



Source: UICC TNM Atlas, 3rd edition, 2nd revision

Priority Order for Coding Subsites

Use the information from reports in the following priority order to code a subsite when the medical record contains conflicting information:

Operative report (TURB)
Pathology report

Multifocal Tumors

Invasive tumor in more than one subsite

Assign site code C679 when the tumor is multifocal (separate tumors in more than one subsite of the bladder).

If the TURB or pathology proves invasive tumor in one subsite and in situ tumor in all other involved subsites, code to the subsite involved with **invasive** tumor.

Bladder Wall Pathology

The bladder wall is composed of three layers. There may be "sub layers" within the major layer of the bladder.

Bladder Layer	Sub layer	Synonyms	Staging	Description
Mucosa		Epithelium, transitional epithelium, urothelium, mucosal surface, transitional mucosa	No blood vessels, in situ/noninvasive	First layer on inside of bladder; Lines bladder, ureters, and urethra
	Basement membrane		No invasion of basement membrane is in situ Invasion/penetration of basement membrane is invasive	Single layer of cells that lies beneath the mucosal layer separating the epithelial layer from the lamina propria
	Submucosa	Submucous coat, lamina propria, areolar connective tissue	Invasive	Areolar connective tissue interlaced with the muscular coat. Contains blood vessels, nerves, and in some regions, glands
Lamina propria		Submucosa, Suburothelial connective tissue, subepithelial tissue, stroma, muscularis mucosa, transitional epithelium	Invasive	
Muscle	Bladder wall	Muscularis, muscularis propria, muscularis externa, smooth muscle	Invasive	

Tumor extends through the bladder wall (invades regional tissue) when the tumor is stated to involve one of the following areas:

Serosa (Tunica serosa): The outermost serous coat is a reflection of the peritoneum that covers the superior surface and the upper parts of the lateral surfaces of the urinary bladder. The serosa is part of visceral peritoneum. The serosa is reflected from these bladder surfaces onto the abdominal and pelvic walls.

Perivesical fat

Adventitia: Some areas of the bladder do not have a serosa. Where there is no serosa, the connective tissue of surrounding structures merges with the connective tissue of the bladder and is called adventitia.

Histology[1]

Most bladder cancers are transitional cell carcinomas. Other types include squamous cell carcinoma and adenocarcinoma.
Adenocarcinomas tend to occur in the urachus or, frequently, the trigone of the bladder[2]
Other bladder histologic types include sarcoma, lymphoma, and small cell carcinoma.
Rhabdomyosarcoma occurs in children.

Behavior Code

Code the behavior as malignant /3, **not** in situ /2, when

- the only surgery performed is a transurethral resection of the bladder (TURB) documenting that depth of invasion cannot be measured because there is no muscle in the specimen

  AND

- the physician's TNM designation is **not** available

  OR

- the pathology report says the submucosa is invaded with tumor

  OR

- the pathology report does not mention whether the submucosa is free of tumor or has been invaded by tumor

Code the behavior as in situ /2 when

- the TNM designation is Ta for TURB with no muscle in the specimen

  OR

- the pathology report says the submucosa is free of tumor

First Course Treatment

BCG
Code BCG as both surgery and immunotherapy. See the SEER manual, Appendix C, Bladder Surgery Codes, SEER Note under code 16

Treatment Modalities (most common treatments)

TURB with fulguration
TURB with fulguration followed by intravesical BCG (bacillus Calmette-Guerin) is usually used for patients with multiple tumors or for high-risk patients.
TURB with fulguration followed by intravesical chemotherapy
Photodynamic therapy (PDT) using laser light and chemotherapy
Segmental cystectomy (rare)

[1] PDQ

[2] Clinical Oncology, 8th edition

Radical cystectomy in patients with extensive or refractory superficial tumor
Internal irradiation (needles, seeds, wires, or catheters placed into or near the tumor) with or without external-beam irradiation
Chemotherapy
Immunotherapy/biologic therapy

Coding Guidelines

Urethra
C680

First Course of Therapy

Do not code Lupron as treatment for a primary in the prostatic urethra.

Coding Guidelines

Brain [and Other Parts of Central Nervous System] Meninges C700-C709, Brain C710–C719, Spinal Cord, Cranial Nerves and Other Parts of Central Nervous System C720–C729

(Except for M9750, 9760-9764, 9800-9820, 9826, 9831-9920, 9931-9992)

Reportability

Juvenile astrocytoma, listed as 9421/1 in ICD-O-3, is reportable. Record as 9421/3 in the registry.

Histology

Code low grade neuroepithelial neoplasm to 9505/1(ganglioglioma NOS).

Laterality

Meningioma

Assign code 4 (Bilateral involvement, lateral origin unknown; stated to be single primary) when

- **one** meningioma extends to both right and left sides

  AND
- it is **not** possible to determine whether the meningioma originated on the left or the right

Coding Guidelines

Thyroid Gland
C739

Coding Hormone Therapy

Code Hormone Therapy as 01 for follicular and/or papillary thyroid cancer when thyroid hormone therapy is given.

Do not code replacement therapy as treatment **unless** the tumor is papillary and/or follicular. The thyroid gland produces hormones that influence essentially every organ, tissue and cell in the body. When the thyroid is partially or totally removed, it is no longer able to secrete these essential hormones and the patient is placed on hormone replacement therapy.

The growth of follicular cell cancer depends on thyroid stimulating hormone. Suppression of these hormones is thought to deprive the cells of a growth-promoting influence. Patients with follicular cell-derived cancers have been treated with supraphysiologic doses of thyroid hormone to suppress serum thyroid-stimulating hormones. This treatment has been an industry standard for more than forty years.

Generic Thyroid Drug Names

Levothyroxine/L-thyroxine
Liothyronine
Liotrix
Methimazole
Natural Thyroid
Propylthiouracil/PTU
Thyrotropin alfa

Thyroid Drugs Brand Names

Armour Thyroid
Cytomel
Levothroid
Levoxyl
Naturethroid
Synthroid
Tapazole
Thyrogen
Thyrolar
Unithroid
Westhroid

Coding Guidelines

Kaposi Sarcoma of All Sites (M9140)

Primary Site

Kaposi sarcoma that is not AIDS-related is a rare condition. It usually presents as localized disease with an easily recognized primary site.

AIDS-related Kaposi sarcoma usually presents as a disseminated disease with involvement of mucosal surfaces, visceral surfaces of organs, and skin. It is important to review consecutive records carefully to determine the extent of involvement at diagnosis. Review of a single record may reveal only the site being treated during that admission.

1. Code the Kaposi sarcoma to the **primary site in which it arises.**
2. If the Kaposi sarcoma is present in **the skin and another site** simultaneously, code to the specified skin site, (C44_).
3. If the **primary site is unknown** or cannot be determined, code skin, NOS (C449).

Coding Guidelines

Lymphoma
M9590-9699, 9702-9727, 9735, 9737-9738, 9823, 9827

See the *Hematopoietic and Lymphoid Neoplasm Case Reportability and Coding Manual* and the Hematopoietic Database (DB) for more information and coding instructions.

First Course of Therapy

Do not code proton pump inhibitors as treatment. Proton pump inhibitors are used for gastric acid suppression; they treat symptoms, not the lymphoma itself.

Surgery of Primary Site

***Note*:** Surgery codes for lymph nodes (C770-C779) are not limited to lymphomas. Use the site-specific coding scheme corresponding to the primary site or histology.

Surgery codes for lymph nodes exclude these histologies: M9727, 9732, 9741-9742, 9762-9809, 9832, 9840-9931, 9945-9946, 9950-9967, 9975-9992

Use of code 25 (Local tumor excision, NOS): Assign code 25 only when one lymph node was identified through clinical evaluations and was removed. If multiple nodes are involved and only one is removed, code as a biopsy; do not code in Surgery of Primary Site.

Surgery Codes for Hematopoietic/Reticuloendothelial/Immunoproliferative/Myeloproliferative Disease include C420, C421, C423, C424 (with any histology) or M9727, 9732, 9741-9742, 9762-9809, 9832, 9840-9931, 9945-9946, 9950-9967, 9975-9992

Assign code 98 for all hematopoietic/reticuloendothelial/immunoproliferative/myeloproliferative disease sites and/or histologies, WITH or WITHOUT surgical treatment unless the case is a DCO (Death Certificate Only). Assign 99 for DCOs.

Surgical procedures for hematopoietic, reticuloendothelial, immunoproliferative, myeloproliferative primaries are to be recorded using the data item Surgical Procedure of Other Site (NAACCR Item # 1294).

ARIZONA DEPARTMENT
OF HEALTH SERVICES

ARIZONA CANCER REGISTRY

- SEER Coding Guidelines – Site Specific Modules
  - 2016
- Historical information for coding Grade
  - 2012-2015

Source: Adamo M, Dickie, L, Ruhl J. (January 2016). *SEER Program Coding and Staging Manual 2016.* National Cancer Institute, Bethesda, MD 20850-9765. U.S. Department of Health and Human Services National Institutes of Health National Cancer Institute

Coding Guidelines

Bladder C670–C679

Reportability

Do **not** report bladder cancer based on **UroVysion** test results alone. Report the case if there is a physician statement of malignancy and/or the patient was treated for cancer.

Not reportable

Papillary urothelial neoplasms of low malignant potential (PUNLMPs)

The WHO classification categorizes "PUNLMP" as borderline, 8130/1. The definition is "a papillary urothelial tumor which resembles the exophytic urothelial papilloma, but shows increased cellular proliferation exceeding the thickness of normal urothelium." The histopathologic description is "the papillae of PUNLMP are discrete, slender and not fused and are lined by multilayered urothelium with minimal to absent cytologic atypia….Mitoses are rare and have a basal location."

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Primary Site

C670 Trigone of bladder
Base of bladder
Floor
Below interureteric ridge* (interureteric crest, or interureteric fold)

C671 Dome of bladder
Vertex
Roof
Vault

C672 Lateral wall of bladder
Right wall
Left wall
Lateral to ureteral orifice
Sidewall

C673 Anterior wall of bladder

C674 Posterior wall of bladder

C675 Bladder neck
Vesical neck
Internal urethral orifice
Internal urethral/uretero orifice

C676 Ureteric orifice
Just above ureteric orifice

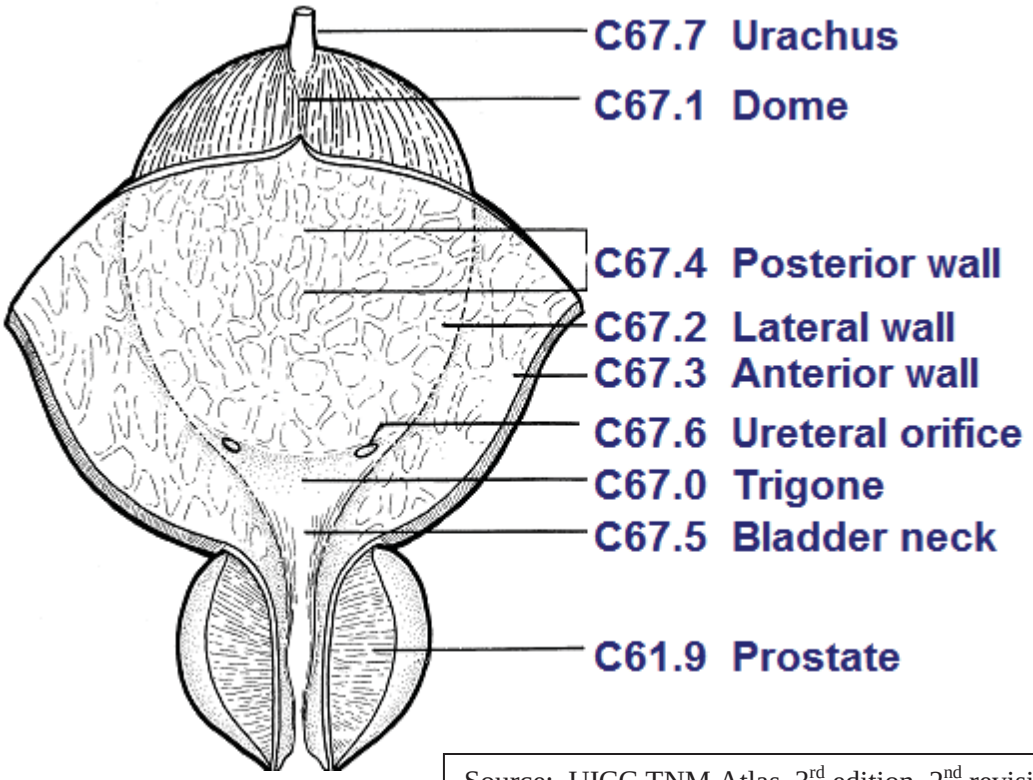
C677 Urachus
Mid umbilical ligament
Urachal remnant

C678 Overlapping lesion of bladder
Lateral-posterior wall (hyphen)
Fundus

C679 Bladder, NOS
Lateral posterior wall (no hyphen)

*The **interureteric ridge** is a fold of mucous membrane extending across the bladder between the ureteric orifices and forms one of the boundaries for the trigone of the bladder.

Bladder Anatomy and ICD-O-3



Source: UICC TNM Atlas, 3rd edition, 2nd revision

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Operative report (TURB)
Pathology report

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Invasive tumor in more than one subsite

Assign site code C679 when the tumor is multifocal (separate tumors in more than one subsite of the bladder).

If the TURB or pathology proves invasive tumor in one subsite and in situ tumor in all other involved subsites, code to the subsite involved with **invasive** tumor.

Bladder Wall Pathology

The bladder wall is composed of three layers. There may be "sub layers" within the major layer of the bladder.

Bladder Layer	Sub layer	Synonyms	Staging	Description
Mucosa		Epithelium, transitional epithelium, urothelium, mucosal surface, transitional mucosa	No blood vessels, in situ/noninvasive	First layer on inside of bladder; Lines bladder, ureters, and urethra
	Basement membrane		No invasion of basement membrane is in situ Invasion/penetration of basement membrane is invasive	Single layer of cells that lies beneath the mucosal layer separating the epithelial layer from the lamina propria
	Submucosa	Submucous coat, lamina propria, areolar connective tissue	Invasive	Areolar connective tissue interlaced with the muscular coat. Contains blood vessels, nerves, and in some regions, glands
Lamina propria		Submucosa, Suburothelial connective tissue, subepithelial tissue, stroma, muscularis mucosa, transitional epithelium	Invasive	
Muscle	Bladder wall	Muscularis, muscularis propria, muscularis externa, smooth muscle	Invasive	

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Perivesical fat

Adventitia: Some areas of the bladder do not have a serosa. Where there is no serosa, the connective tissue of surrounding structures merges with the connective tissue of the bladder and is called adventitia.

Histology[1]

Most bladder cancers are transitional cell carcinomas. Other types include squamous cell carcinoma and adenocarcinoma.
Adenocarcinomas tend to occur in the urachus or, frequently, the trigone of the bladder[2]
Other bladder histologic types include sarcoma, lymphoma, and small cell carcinoma.
Rhabdomyosarcoma occurs in children.

Behavior Code

Code the behavior as malignant /3, **not** in situ /2, when

- the only surgery performed is a transurethral resection of the bladder (TURB) documenting that depth of invasion cannot be measured because there is no muscle in the specimen

  AND

- the physician's TNM designation is **not** available

  OR

- the pathology report says the submucosa is invaded with tumor

  OR

- the pathology report does not mention whether the submucosa is free of tumor or has been invaded by tumor

Code the behavior as in situ /2 when

- the TNM designation is Ta for TURB with no muscle in the specimen

  OR

- the pathology report says the submucosa is free of tumor

First Course Treatment

BCG
Code BCG as both surgery and immunotherapy. See the SEER manual, appendix C, Bladder Surgery Codes, SEER Note under code 16

Treatment Modalities (most common treatments)

TURB with fulguration
TURB with fulguration followed by intravesical BCG (bacillus Calmette-Guerin) is usually used for patients with multiple tumors or for high-risk patients.
TURB with fulguration followed by intravesical chemotherapy
Photodynamic therapy (PDT) using laser light and chemotherapy
Segmental cystectomy (rare)

[1] PDQ

[2] Clinical Oncology, 8th edition

Radical cystectomy in patients with extensive or refractory superficial tumor
Internal irradiation (needles, seeds, wires, or catheters placed into or near the tumor) with or without external-beam irradiation
Chemotherapy
Immunotherapy/biologic therapy

Coding Guidelines

Brain [and Other Parts of Central Nervous System]
Meninges C700-C709, Brain C710–C719, Spinal Cord, Cranial Nerves and Other Parts of Central Nervous System C720–C729

(Except for M9750, 9760-9764, 9800-9820, 9826, 9831-9920, 9931-9992)

Reportability

Juvenile astrocytoma, listed as 9421/1 in ICD-O-3, is reportable. Record as 9421/3 in the registry.

Histology

Code low grade neuroepithelial neoplasm to 9505/1(ganglioglioma NOS).

Laterality

Meningioma

Assign code 4 (Bilateral involvement, lateral origin unknown; stated to be single primary) when

- **one** meningioma extends to both right and left sides

  AND
- it is **not** possible to determine whether the meningioma originated on the left or the right

Coding Guidelines

Breast
C500 -C509

Primary Site

C500 Nipple (areolar)
Paget disease without underlying tumor

C501 Central portion of breast (subareolar) area extending 1 cm around areolar complex
Retroareolar
Infraareolar
Next to areola, NOS
Behind, beneath, under, underneath, next to, above, cephalad to, or below nipple
Paget disease with underlying tumor
Lower central

C502 Upper inner quadrant (UIQ) of breast
Superior medial
Upper medial
Superior inner

C503 Lower inner quadrant (LIQ) of breast
Inferior medial
Lower medial
Inferior inner

C504 Upper outer quadrant (UOQ) of breast
Superior lateral
Superior outer
Upper lateral

C505 Lower outer quadrant (LOQ) of breast
Inferior lateral
Inferior outer
Lower lateral

C506 Axillary tail of breast
Tail of breast, NOS
Tail of Spence

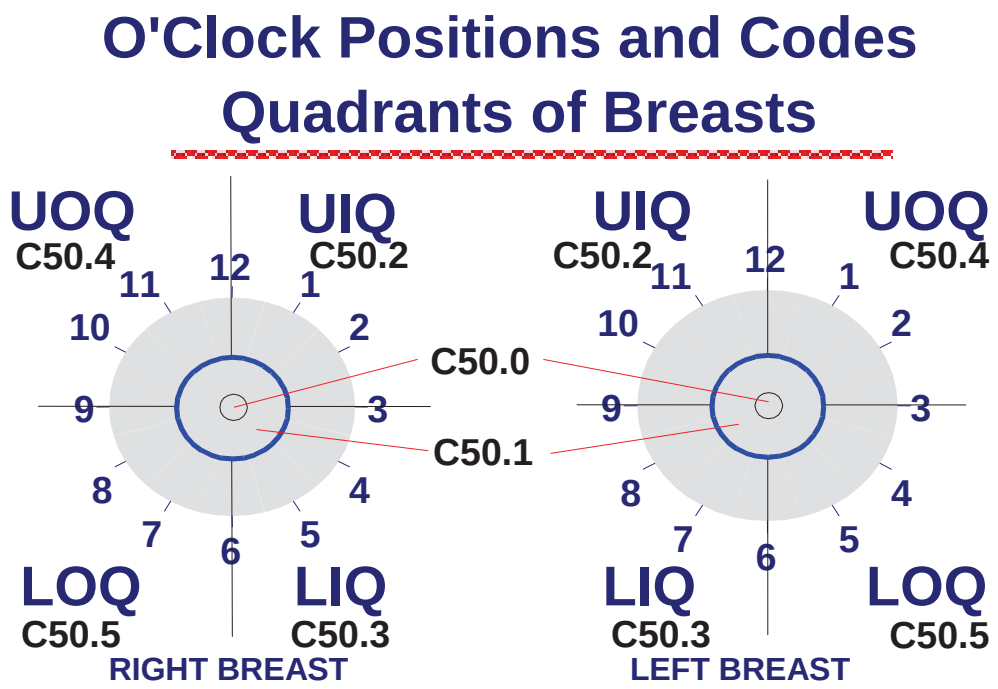
C508 Overlapping lesion of breast
Inferior breast, NOS
Inner breast, NOS
Lateral breast, NOS
Lower breast, NOS
Medial breast, NOS
Midline breast NOS

Outer breast NOS
Superior breast, NOS
Upper breast, NOS
3:00, 6:00, 9:00, 12:00 o'clock

C509 Breast, NOS
Entire breast
Multiple tumors in different subsites within breast
Inflammatory without palpable mass
¾ or more of breast involved with tumor
Diffuse (tumor size 998)

Additional Subsite Descriptors

The position of the tumor in the breast may be described as the positions on a clock



Coding Subsites

Use the information from reports in the following priority order to code a subsite when there is conflicting information:

1. Pathology report
2. Operative report
3. Physical examination
4. Mammogram, ultrasound

Code the subsite with the **invasive** tumor when the pathology report identifies invasive tumor in one subsite and in situ tumor in a different subsite or subsites.

Code the specific quadrant for multifocal tumors all within one quadrant

- Do **not** code C509 (Breast, NOS) in this situation

Code the primary site to C508 when

- there is a single tumor in two or more subsites and the subsite in which the tumor originated is unknown
- there is a single tumor located at the 12, 3, 6, or 9 o'clock position on the breast

Code the primary site to C509 when there are multiple tumors (two or more) in at least two quadrants of the breast.

Laterality

Laterality must be coded for all subsites.

Breast primary with positive nodes and no breast mass found: Code laterality to the side with the positive nodes

Coding Guidelines

Colon
C180–C189

The prognosis of patients with colon cancer is related to the degree of penetration of the tumor through the bowel wall, the presence or absence of nodal involvement, and the presence or absence of distant metastases.

Primary Site

Priority Order for Coding Primary Site

Use the information from reports in the following priority order to code the primary site when there is conflicting information:

Resected cases
- Operative report with surgeon's description
- Pathology report
- Imaging

Polypectomy or excision without resection
- Endoscopy report
- Pathology report

Subsites

Code the subsite with the most tumor when the tumor overlaps two subsites.
Code C188 when both subsites are equally involved.

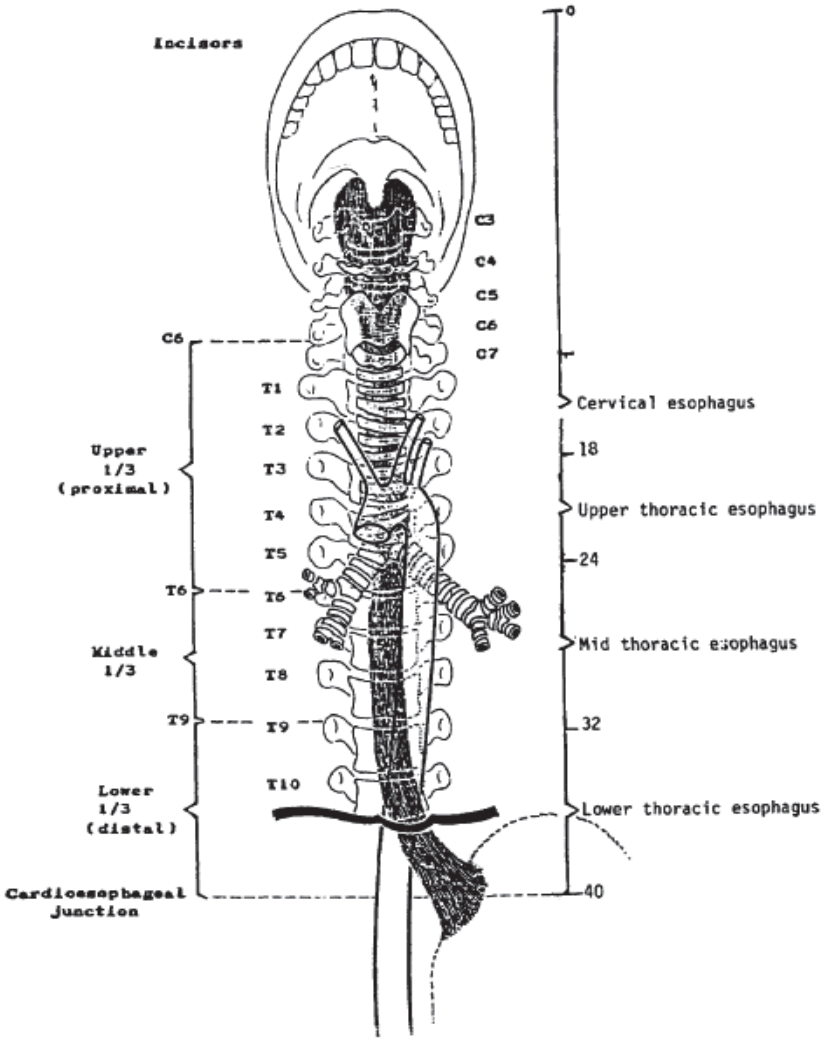
Coding Guidelines

Esophagus
C150-C155, C158-C159

Primary Site

There are two systems that divide the esophagus into three subsites. The first system divides the esophagus into the upper third, middle third, and lower third. The second system describes the subsites as the cervical esophagus, upper thoracic esophagus, mid thoracic esophagus, and lower thoracic (abdominal) esophagus. The subsites for these two different systems are not identical. Assign the ICD-O-3 topography code that describes the primary site documented in the medical record. See the following image for an illustration of both systems.

Measurements of the Esophagus
(From the Incisors to the Stomach)



First Course Treatment

Do **not** code proton pump inhibitors (PPI) as treatment

Do **not** code RFA for Barrett's esophagus as treatment

HALO 90 ultra radiofrequency ablation (RFA) of Barrett's esophagus is used to reduce progression of high-grade dysplasia to esophageal cancer. It is not used to treat esophageal cancer.

Coding Guidelines

Lung
C340–C349

Primary Site

C340 Main bronchus
Carina
Hilum
Bronchus intermedius

C341 Upper lobe, lung
Lingula
Apex
Pancoast tumor

C342 Middle lobe, lung (Right lung only)

C343 Lower lobe, lung
Base

C348 Overlapping lesion of lung

C349 Lung, NOS
Bronchus, NOS

Laterality

Laterality must be coded for all subsites except carina.

Pancoast Tumor

Pancoast tumor is a lung cancer in the upper-most segment of the lung that directly invades the brachial plexus (nerve bundles) of the neck, causing pain. It is by definition malignant. Code the date of diagnosis from the imaging report when a Pancoast tumor is identified on imaging prior to biopsy.

Coding Guidelines

Rectosigmoid Junction C199

Primary Site

A tumor is classified as **rectosigmoid** when differentiation between rectum and sigmoid is not possible.

A tumor is classified as **rectal** if

- lower margin lies less than 16 cm from the anal verge **or**
- any part of the tumor is located at least partly within the supply of the superior rectal artery

Anatomic Transition from Sigmoid to Rectum

In the sigmoid colon, approximately 12 to 15 cm from the dentate line, the tenia coli fuse to form the circumferential longitudinal muscle of the rectal wall.

The **rectum** is defined clinically as the distal large intestine commencing opposite the sacral promontory and ending at the anorectal ring, which corresponds to the proximal border of the puborectalis muscle palpable on digital rectal examination. It extends 16 cm from the anal verge.[1]

Glossary

Anal verge: The lower (distal) end of the anal canal, junction between the skin of the anal canal and the perianal skin.

Anorectal ring: Top (proximal end) of the anal canal.

Dentate line: An anatomic landmark located between the anal verge and the anorectal ring indicating where the rectum changes to the anal canal. Also called the pectinate line.

Tenia coli: (Plural: teniae coli). Any one of three longitudinal bands of smooth muscle in the colon. They extend from the cecum to the sigmoid colon. Each band is approximately 8 mm wide throughout most of the colon. The widths of the teniae increase in the sigmoid colon and eventually fuse into a covering of longitudinal muscle in the rectum.

[1] Wittekind C, Henson DE, Hutter RVP, Sobin LH, eds. TNM Supplement: A Commentary on Uniform Use. 2nd ed. New York, NY: Wiley-Liss; 2001.

Coding Guidelines

Urethra
C680

First Course of Therapy

Do not code Lupron as treatment for a primary in the prostatic urethra.

The following pages are historical information used for coding Grade in Arizona. The information is from *FORDS 2012/ACR Supplement* and also used for cases diagnosed through 2013.

Grade

1) Special Grades

The CoC did not support converting special codes for *Grade/Differentiation.*

● If a tumor differentiation grade was not available for the cancer the CoC instruction was to assign code 9 to Grade/Differentiation.

2) All Others

The CoC allowed the following table to be used if you could not follow the priority instructions for coding grade. If the grade could not be recorded according to the instructions provided in *FORDS 2012* and *FORDS 2013* versions, the following table was used to code *Grade/Differentiation*. The table was used for verbal descriptions or when a grade was found in the record without specification of the number of grades in the grading system, and when a special grade did not apply.

●In addition this statement was noted: Some state or regional registries require recording or converting special grades for *Grade/Differentiation;* if you are required to do so, use the instructions provided by that source.

Term	Code for Grade/Differentiation
Grade I, i, 1	1
Well differentiated	1
Differentiated, NOS	1
Grade II, ii, 2	2
Grade 1-2	2
Fairly well differentiated	2
Intermediate differentiation	2
Low grade	2
Mid-differentiated	2
Moderately differentiated	2
Moderately well differentiated	2
Partially differentiated	2
Partially well differentiated	2
Relatively or generally well differentiated	2
Grade III, iii, 3	3
Grade 2-3	3
Dedifferentiated	3
Intermediate grade	3
Medium grade	3
Moderately poorly differentiated	3
Moderately undifferentiated	3
Poorly differentiated	3
Relatively poorly differentiated	3
Relatively undifferentiated	3

Slightly differentiated	3
Grade IV, iv, 4	4
Grade 3-4	4
Anaplastic	4
High grade*	4
Undifferentiated	4
Unknown, not available	9
Not applicable	9
Non-high grade	9

* Not to be confused with “high grade dysplasia”, which describes a morphologic condition not required to be abstracted by the Commission on Cancer.

The Arizona Cancer Registry was a state that required the coding of special grades and followed the SEER guidelines on grade. The following are notes directly inserted into *FORDS* by the ACR.

1) Facilities are required to continue to use the coding grade systems guidelines and conversions for coding Grade/ Differentiation (NAACCR item #440) as documented in previous ACR/FORDS manuals. For ease of retrieval the ACR has created a separate document of the *SEER Coding Guidelines for Grade*. The guidelines contain rules for Bladder, Brain, Sarcoma, Breast, Colon, Kidney, Prostate, Renal Pelvis/Ureter, and Urethra. These guidelines also have some additional helpful information.

2) Additional Grade Coding Guidelines

Source: Adamo MB, Johnson CH, Ruhl JL, Dickie, LA (eds). *2012 SEER Program Coding and Staging Manual*. National Cancer Institute, NIH Publication number 12-5581, Bethesda, MD

1. See site-specific coding guidelines related to priority order of coding grade in the *SEER Coding Guidelines for Grade.* The site-specific instruction takes priority over general instructions. The guidelines contain rules for Bladder, Brain, Sarcoma, Breast, Colon, Kidney, Prostate, Renal Pelvis/Ureter, and Urethra.
2. Record the tumor grade from the pathology or cytology report prior to adjuvant treatment (This guideline is effective with cases diagnosed in 2010 and later. This is a change from previous rules.)

a. Code grade as 9 when

i. No grade is specified on the pathology reporting findings from cytology or tissue assessment prior to adjuvant treatment

OR

ii. The pathology report from cytology or tissue assessment prior to neoadjuvant treatment is not available.

3. Code the grade from the primary tumor only, never from a metastatic site or a recurrence.
4. If more than one grade is recorded for a single tumor, code the highest grade, even if it is a focus.

Example: Pathology report reads: Grade II adenocarcinoma with a focus of undifferentiated adenocarcinoma. Code the tumor grade as grade 4.

5. Differentiation has priority over nuclear grade when both are specified.

Example: Liver biopsy histology described as "well differentiated hepatocellular carcinoma, nuclear grade 2/4." Code the differentiation as grade 1 (well differentiated).

6. Code the grade of the invasive component when the tumor has both in situ and invasive portions. If the grade of the invasive component is unknown, code the grade of the in situ component.
7. Do not code the grade assigned to dysplasia.
Example: High grade dysplasia (adenocarcinoma in situ). Code to 9 (unknown grade).
8. Do not code grade based on the FNCLCC (Federation Nationale des Centres de Lutte Contre le Cancer) grade. The FNCLCC grade is collected in one of the Collaborative Stage Site Specific Factors.
9. Do not code grade based on FIGO. The conversion from a three-grade system to a four-grade system does not work for FIGO grade three. Since FIGO G3 includes both Poorly differentiated and undifferentiated, it cannot be converted.
10. Do not record WHO grade for brain and CNS neoplasms.
11. Code to 9 (unknown grade) when the primary site is unknown.

The following pages are from an ACR document created to assist registries in coding grade. Information was taken directly from the SEER Coding Guidelines for Grade.

Source: Adamo MB, Johnson CH, Ruhl JL, Dickie, LA, (eds.). *2012 SEER Program Coding and Staging Manual*. National Cancer Institute, NIH Publication number 12-5581, Bethesda, MD

Coding Guidelines
BLADDER
C670–C679

Primary Site

C670 Trigone of bladder
Base of bladder
Floor
Below interureteric ridge (interureteric crest, or interureteric fold)

C671 Dome of bladder
Vertex
Roof
Vault

C672 Lateral wall of bladder
Right wall
Left wall
Lateral to ureteral orifice
Sidewall

C673 Anterior wall of bladder

C674 Posterior wall of bladder

C675 Bladder neck
Vesical neck
Internal urethral orifice

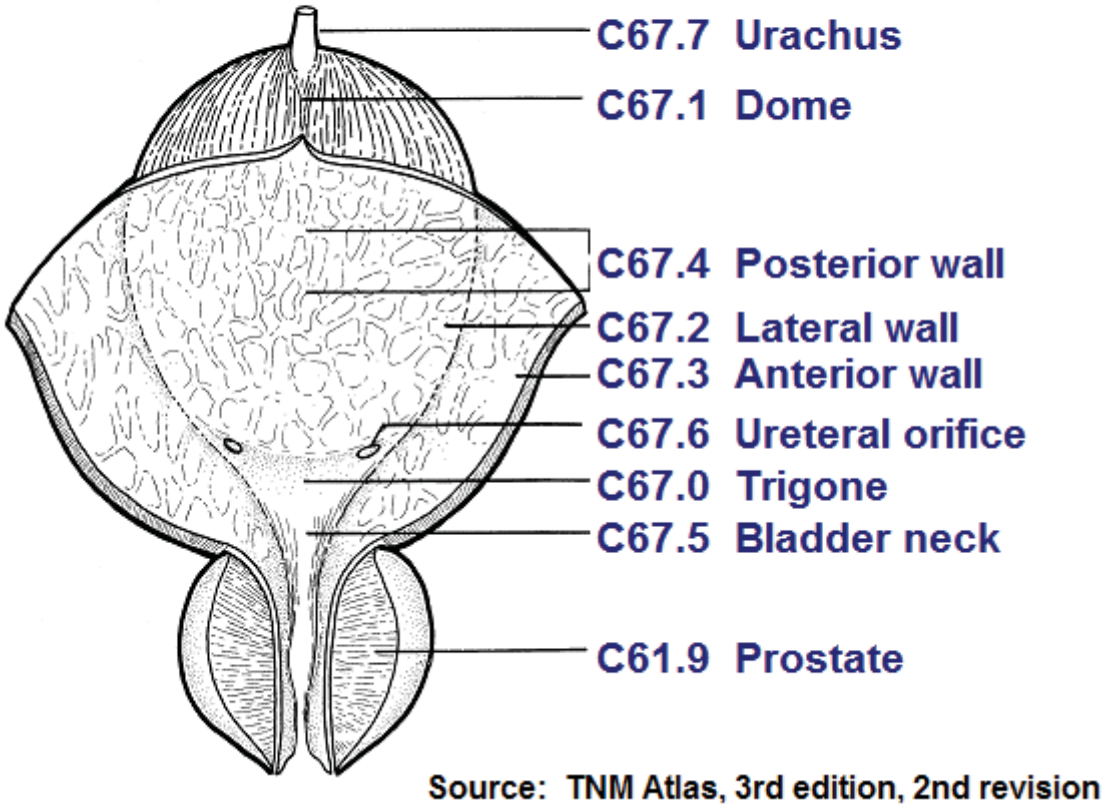
C676 Ureteric orifice
Just above ureteric orifice

C677 Urachus
Mid umbilical ligament

C678 Overlapping lesion of bladder
Lateral-posterior wall (hyphen)
Fundus

C679 Bladder, NOS
Lateral posterior wall (no hyphen)

Bladder Anatomy and ICD-O-3



Source: TNM Atlas, 3rd edition, 2nd revision

Priority Order for Coding Subsites

Use the information from reports in the following priority order to code a subsite when the medical record contains conflicting information:

Operative report (TURB)
Pathology report

Multifocal Tumors

Invasive tumor in more than one subsite

Assign site code C679 when the tumor is multifocal (separate tumors in more than one subsite of the bladder).

If the TURB or pathology proves invasive tumor in one subsite and in situ tumor in all other involved subsites, code to the subsite involved with **invasive** tumor.

Bladder Wall Pathology

The bladder wall is composed of three layers. There may be "sub layers" within the major layer of the bladder.

Bladder Layer	Sub layer	Synonyms	Staging	Description
Mucosa		Epithelium, transitional epithelium, urothelium, mucosal surface, transitional mucosa	No blood vessels, in situ/noninvasive	First layer on inside of bladder; Lines bladder, ureters, and urethra
	Basement membrane		No invasion of basement membrane is in situ Invasion/penetration of basement membrane is invasive	Single layer of cells that lies beneath the mucosal layer separating the epithelial layer from the lamina propria
	Submucosa	Submucous coat, lamina propria, areolar connective tissue	Invasive	Areolar connective tissue interlaced with the muscular coat. Contains blood vessels, nerves, and in some regions, glands
Lamina propria		Submucosa, Suburothelial connective tissue, subepithelial tissue, stroma, muscularis mucosa, transitional epithelium	Invasive	
Muscle	Bladder wall	Muscularis, muscularis propria, muscularis externa, smooth muscle	Invasive	

Tumor extends through the bladder wall (invades regional tissue) when the tumor is stated to involve one of the following areas:

Serosa (Tunica serosa): The outermost serous coat is a reflection of the peritoneum that covers the superior surface and the upper parts of the lateral surfaces of the urinary bladder. The serosa is part of visceral peritoneum. The serosa is reflected from these bladder surfaces onto the abdominal and pelvic walls.

Perivesical fat

Adventitia: Some areas of the bladder do not have a serosa. Where there is no serosa, the connective tissue of surrounding structures merges with the connective tissue of the bladder and is called adventitia.

HISTOLOGY[1]

Most bladder cancers are transitional cell carcinomas. Other types include squamous cell carcinoma and adenocarcinoma.
Adenocarcinomas tend to occur in the urachus or, frequently, the trigone of the bladder[2]
Other bladder histologic types include sarcoma, lymphoma, and small cell carcinoma.
Rhabdomyosarcoma occurs in children.

Behavior Code

Code the behavior as malignant /3, **not** in situ /2, when

- the only surgery performed is a transurethral resection of the bladder (TURB) documenting that depth of invasion cannot be measured because there is no muscle in the specimen

and

- the physician's TNM designation is not available

Code the behavior as in situ /2 when the TNM designation is Ta for TURB with no muscle in the specimen.

Grade

Note: These guidelines pertain to the data item Grade. Refer to the Collaborative Stage Data Collection Manual for instructions on coding site-specific factors.

Code grade from the original primary. Do **not** code grade from recurrence.

Non-invasive papillary urothelial (transitional) carcinoma

Code grade 1 (well differentiated) for non-invasive papillary urothelial carcinoma, low grade

Code grade 3 (poorly differentiated) for non-invasive papillary urothelial (transitional) carcinoma, high grade

Urothelial carcinoma in situ

Code grade 9 for urothelial carcinoma in situ

Bladder - The ACR uses the SEER manual as a guide to code tumor grade. Some of the information from the following table may have been used by the ACR. However, the table was not fully documented in the ACR manual, therefore this table is effective for cases diagnosed beginning 1/1/2009.

Invasive Tumors
Three-Grade System (Nuclear Grade)

There are several sites for which a three-grade system is used. The patterns of cell growth are measured on a scale of 1, 2, and 3 (also referred to as low, medium, and high grade). This system measures the proportion of cancer cells that are growing and making new cells and how closely they resemble the cells of the host tissue. Thus, it is similar to a four-grade system, but simply divides the spectrum into three rather than four categories (see conversion table below). The expected outcome is more favorable for lower grades.

[1] PDQ
[2] Clinical Oncology, 8th edition

If a grade is written as 2/3 that means this is a grade 2 of a three-grade system. Do not simply code the numerator. Use the following table to convert the grade to SEER codes.

Term	Grade	SEER Code
1/3, 1/2	Low grade	2
2/3	Intermediate grade	3
3/3, 2/2	High grade	4

FIRST COURSE TREATMENT

TREATMENT MODALITIES (most common treatments)

TURB with fulguration
TURB with fulguration followed by intravesical BCG (bacillus Calmette-Guerin) is usually used for patients with multiple tumors or for high-risk patients.
TURB with fulguration followed by intravesical chemotherapy
Photodynamic therapy (PDT) using laser light and chemotherapy
Segmental cystectomy (rare)
Radical cystectomy in patients with extensive or refractory superficial tumor
Internal irradiation (needles, seeds, wires, or catheters placed into or near the tumor) with or without external-beam irradiation
Chemotherapy
Immunotherapy/biologic therapy

Coding Guidelines
BONES, JOINTS, AND ARTICULAR CARTILAGE C400–C419
PERIPHERAL NERVES AND AUTONOMIC NERVOUS SYSTEM C470–C479
CONNECTIVE, SUBCUTANEOUS, AND OTHER SOFT TISSUES C490–C499
(Except for M9750, 9760-9764, 9800-9820, 9826, 9831-9920, 9931-9992)

Laterality

Laterality is required for sites C400-C403, C413-C414, C471-C472, and C491-C492.

Three-Grade System (Nuclear Grade)

Note: These guidelines pertain to the data item Grade. Refer to the *Collaborative Stage Data Collection Manual* for instructions on coding site-specific factors.

Soft tissue sarcomas are evaluated using a three-grade system. The patterns of cell growth are measured on a scale of 1, 2, and 3 (also referred to as low, medium, and high grade). This system measures the proportion of cancer cells that are growing and making new cells and how closely they resemble the cells of the host tissue. Thus, it is similar to a four-grade system, but divides the spectrum into three rather than four categories (see comparison table below). The expected outcome is more favorable for lower grades.

If a grade is written as 2/3 that means this is a grade 2 of a three-grade system. Do not simply code the numerator. Use the following table to convert the grade to SEER codes.

Term	Grade	SEER Code
1/3, 1/2	Low grade	2
2/3	Intermediate grade	3
3/3, 2/2	High grade	4

Some of this information was provided in previous *FORDS*. This table is consistent with previous tables provided.

Sarcoma

Sarcomas are graded low, intermediate or high grade by the pathologist. Use the following table to convert these terms to the correct code for the data item Grade.

Sarcomas-The ACR uses the SEER manual as a guide to code tumor grade. Some of the information from the following table may have been used by the ACR. However, the table was not fully documented in the ACR manual, therefore this table is effective for cases diagnosed beginning 1/1/2009.

Term	Grade	SEER Code
Well differentiated	I	1
Fairly well differentiated	II	2
Low grade	I-II	2
Mid differentiated	II	2
Moderately differentiated	II	2
Partially differentiated	II	2
Partially well differentiated	I-II	2
Partially well differentiated	II	2
Relatively or generally well differentiated	II	2
Medium grade, intermediate grade	II-III	3
Moderately poorly differentiated	III	3
Moderately undifferentiated	III	3
Poorly differentiated	III	3
Relatively poorly differentiated	III	3

Term	Grade	SEER Code
Relatively undifferentiated	III	3
Slightly differentiated	III	3
High grade	III-IV	4
Undifferentiated, anaplastic, not differentiated	IV	4

Coding Guidelines
BRAIN [AND OTHER PARTS OF CENTRAL NERVOUS SYSTEM]
MENINGES C700-C709, BRAIN C710–C719,
SPINAL CORD, CRANIAL NERVES AND
OTHER PARTS OF CENTRAL NERVOUS SYSTEM C720–C729
(Except for M9750, 9760-9764, 9800-9820, 9826, 9831-9920, 9931-9992)

Reportability

Juvenile astrocytoma, listed as 9421/1 in ICD-O-3, is reportable. Record as 9421/3 in the registry.

Grade

Note: These guidelines pertain to the data item Grade. Refer to the Collaborative Stage Data Collection Manual for instructions on coding site-specific factors.

Astrocytoma

Grade astrocytomas (M-9383, 9400, 9401, 9410-9412, 9420, 9421) according to ICD-O-3 rules.

Term	Grade	SEER Code
Well differentiated	Grade I	1
Intermediate differentiation	Grade II	2
Poorly differentiated	Grade III	3
Anaplastic	Grade IV	4

Use the Three-Grade conversion table in the Grade, Differentiation, or Cell Indicator section (page 81) of the General Instructions to code low grade, intermediate grade, and high grade.

Do **not** record the WHO Grade, Anne/Mayo, or Kemohan grades in the grade field

- Record the WHO grade in the appropriate CS data item
- The use of World Health Organization coding of aggressiveness is reserved for assignment of grade for staging.

Do **not** automatically code glioblastoma multiforme as grade IV

- If no grade is given, code 9 (Cell type not determined, not stated or not applicable)

Always code the Grade, Differentiation field 4 (Grade IV) for anaplastic tumors

- Anaplastic is synonymous with undifferentiated

Code the grade as documented.

Code the Grade, Differentiation field to 9 (Cell type not determined, not stated or not applicable) in the absence of a stated grade on the pathology report.

Laterality

Meningioma

Assign code 4 (Bilateral involvement, lateral origin unknown; stated to be single primary) when

- **one** meningioma extends to both right and left sides

and

- it is **not** possible to determine whether the meningioma originated on the left or the right

Coding Guidelines
Breast
C500 -C509

Primary Site

C500 Nipple (areolar)
Paget disease without underlying tumor

C501 Central portion of breast (subareolar) area extending 1 cm around areolar complex
Retroareolar
Infraareolar
Next to areola, NOS
Behind, beneath, under, underneath, next to, above, cephalad to, or below nipple
Paget disease with underlying tumor
Lower central

C502 Upper inner quadrant (UIQ) of breast
Superior medial
Upper medial
Superior inner

C503 Lower inner quadrant (LIQ) of breast
Inferior medial
Lower medial
Inferior inner

C504 Upper outer quadrant (UOQ) of breast
Superior lateral
Superior outer
Upper lateral

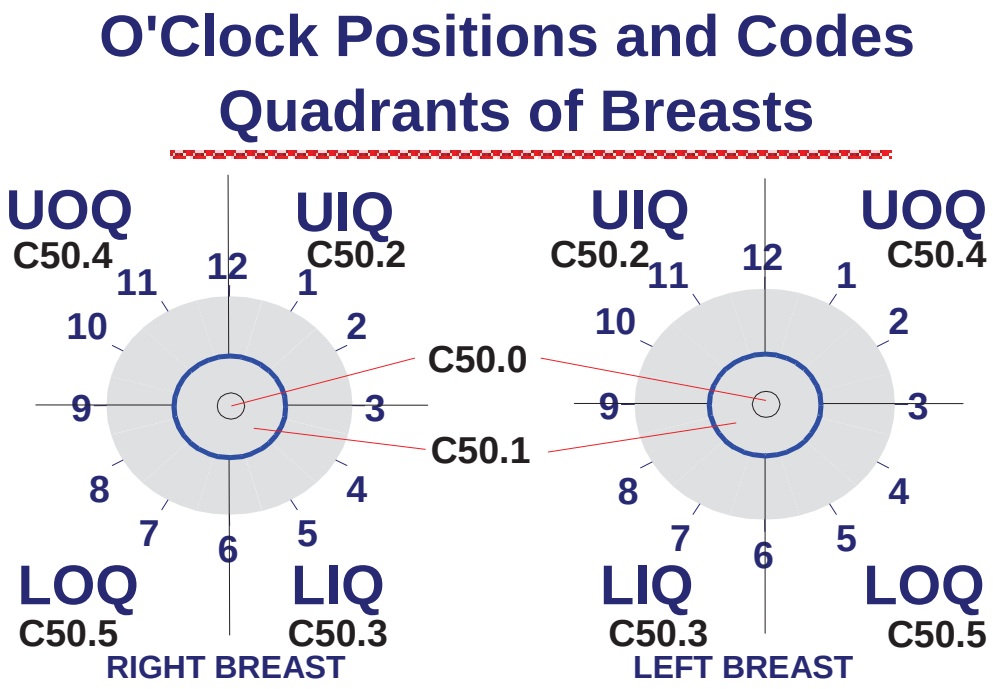
C505 Lower outer quadrant (LOQ) of breast
Inferior lateral
Inferior outer
Lower lateral

C506 Axillary tail of breast
Tail of breast, NOS
Tail of Spence

C508 Overlapping lesion of breast
Inferior breast, NOS
Inner breast, NOS
Lateral breast, NOS
Lower breast, NOS
Medial breast, NOS
Midline breast NOS
Outer breast NOS
Superior breast, NOS
Upper breast, NOS
3:00, 6:00, 9:00, 12:00 o'clock

C509 Breast, NOS
Entire breast
Multiple tumors in different subsites within breast
Inflammatory without palpable mass
¾ or more of breast involved with tumor
Diffuse (tumor size 998)

Additional Subsite Descriptors
The position of the tumor in the breast may be described as the positions on a clock



Coding Subsites
Use the information from reports in the following priority order to code a subsite when there is conflicting information:

1. Pathology report
2. Operative report
3. Physical examination
4. Mammogram, ultrasound

Code the subsite with the **invasive** tumor when the pathology report identifies invasive tumor in one subsite and in situ tumor in a different subsite or subsites.

Code the specific quadrant for multifocal tumors all within one quadrant

- Do **not** code C509 (Breast, NOS) in this situation

Code the primary site to C508 when

- there is a single tumor in two or more subsites **and** the subsite in which the tumor originated is unknown
- there is a single tumor located at the 12, 3, 6, or 9 o'clock position on the breast

Code the primary site to C509 when there are multiple tumors (two or more) in at least two quadrants of the breast

Grade

Note: These guidelines pertain to the data item Grade. Refer to the Collaborative Stage Data Collection Manual for instructions on coding site-specific factors for breast cases.

Invasive Carcinoma
The pathologist assigns a numeric value to each of three tumor characteristics: tubule formation, nuclear pleomorphism, and mitotic counts. The three values are added together and the result is a score ranging from 3 to 9. Use the table below to convert scores to SEER code.

Convert Nottingham Histologic Score or BR Grade to SEER Code

Grade Conversion Table for Invasive Carcinoma

This table and the priority rules for coding grade is consistent with previous tables and information provided in *FORDS/ACR Supplement*.

Nottingham Histologic Scores	BR Grade	Nuclear Grade	Terminology	Histologic Grade	SEER Code
3-5	Low	1/3; 1/2	Well differentiated	I, I/III, 1/3	1
6, 7	Intermediate	2/3	Moderately differentiated	II, II/III; 2/3	2
8, 9	High	2/2; 3/3	Poorly differentiated	III, III/III, 3/3	3
---	---	4/4	Undifferentiated/anaplastic	IV, IV/IV, 4/4	4

Priority Rules for Grading Breast Cancer

Code the tumor grade using the following priority order:

1. Bloom-Richardson (Nottingham) scores 3-9 converted to grade (see conversion table above)
2. Bloom Richardson grade (low, intermediate, high)
3. Nuclear grade only
4. Terminology
5. Differentiation (well differentiated, moderately differentiated, etc)
6. Histologic grade
7. Grade i, grade ii, grade iii, grade iv
8. Bloom-Richardson (BR)

Nottingham combined histologic grade is also known as Elston-Ellis modification of Scarff-Bloom-Richardson grading system. BR may also be called: modified Bloom-Richardson, Scarff-Bloom-Richardson, SBR grading, BR grading, Elston-Ellis modification of Bloom Richardson score, the Nottingham modification of Bloom Richardson score, Nottingham-Tenovus, or Nottingham grade

BR may be expressed in scores (range 3-9)
The score is based on three morphologic features of "invasive no-special-type" breast cancers (degree of tubule formation/histologic grade, mitotic activity, nuclear pleomorphism of tumor cells)
Use the preceding table to convert the score into SEER code.

BR may be expressed as a grade (low, intermediate, high)
BR grade is derived from the BR score
For cases diagnosed 1996 and later, use the preceding table to convert the BR grade into SEER code (Note that the conversion of low, intermediate, and high is different from the conversion used for all other tumors).

DCIS
Ductal carcinoma in situ (DCIS) is not always graded. When DCIS is graded, it is generally divided into three grades: low grade, intermediate grade, and high grade. Use the following table to convert DCIS grade into the SEER code.

DCIS Grade Conversion Table

DCIS Grade	Terminology	SEER Code
Grade I	Low	1
Grade II	Intermediate	2
Grade III	High	3

Laterality
Laterality must be coded for all subsites.

Breast primary with positive nodes and no breast mass found: Code laterality to the side with the positive nodes

Coding Guidelines
COLON
C180–C189

The prognosis of patients with colon cancer is related to the degree of penetration of the tumor through the bowel wall, the presence or absence of nodal involvement, and the presence or absence of distant metastases.

Primary Site

Priority Order for Coding Primary Site

Use the information from reports in the following priority order to code the primary site when there is conflicting information:

Resected cases
- Operative report with surgeon's description
- Pathology report
- Imaging

Polypectomy or excision without resection
- Endoscopy report
- Pathology report

Subsites

Code the subsite with the most tumor when the tumor overlaps two subsites.
Code C188 when both subsites are equally involved.

Grade

Note: These guidelines pertain to the data item Grade. Refer to the Collaborative Stage Data Collection Manual for instructions on coding site-specific factors.

Colon cancer is often graded using a two-grade system; Low Grade (2) or High Grade (4). If the grade is listed as 1/2 or as low grade, convert to a grade 2. If the grade is listed as 2/2 or as high grade, convert to a code 4.

Code the highest grade given.

Term	Grade	SEER Code
Well differentiated	I	1
Fairly well differentiated	II	2
Low grade	I-II	2
Mid differentiated	II	2
Moderately differentiated	II	2
Partially differentiated	II	2
Partially well differentiated	I-II	2
Partially well differentiated	II	2
Relatively or generally well differentiated	II	2

This table is consistent with previous information provided in *FORDS/ACR Supplement*.

Term	Grade	SEER Code
Medium grade, intermediate grade	II-III	3
Moderately poorly differentiated	III	3
Moderately undifferentiated	III	3
Poorly differentiated	III	3
Relatively poorly differentiated	III	3
Relatively undifferentiated	III	3
Slightly differentiated	III	3
High grade	III-IV	4
Undifferentiated, anaplastic, not differentiated	IV	4

Coding Guidelines
KIDNEY
Kidney C649

Laterality

Laterality is required for C649.

Grade

Note: These guidelines pertain to the data item Grade. Refer to the *Collaborative Stage Data Collection Manual* for instructions on coding site-specific factors.

The preferred grading scheme for renal cell carcinoma was developed by Fuhrman et al. Scoring is based on the worst (highest) grade present in the tumor even if only a minor component.

Priority Rules for Coding Grade of Tumor

1. Fuhrman grade
2. Nuclear grade
3. Terminology (well diff, mod diff)
4. Histologic grade (grade 1, grade 2)

This information is consistent with previous information provided in *FORDS/ACR Supplement*.

These prioritization rules do **not** apply to Wilms tumor (8960).

Coding Guidelines
PROSTATE GLAND
C619

Grade

Note: These guidelines pertain to the data item Grade. Refer to the *Collaborative Stage Data Collection Manual* for instructions on coding site-specific factors for prostate cases.

Priority Rules for Grading Prostate Cancer

Code the tumor grade using the following priority order

1. Gleason score (Use the table to convert Gleason score to the appropriate code)
2. Terminology

   Differentiation (well differentiated, moderately differentiated, etc)
3. Histologic grade

   Grade i, grade ii, grade iii, grade iv
4. Nuclear grade only

This information and the table below is consistent with previous information in the *FORDS/ACR Supplement*.

Gleason Pattern

Prostate cancers are commonly graded using Gleason score or pattern. Gleason grading is based on a 5-component system, based on 5 histologic patterns. The pathologist will evaluate the primary pattern (most predominant) and secondary patterns (second most predominant) for the tumor.

Example: A Gleason pattern of 2 + 4 means that the primary pattern is 2 and the secondary pattern is 4.

Gleason Score

The primary and secondary patterns are added together to create a score. Primary pattern is doubled when there is no secondary pattern. Tertiary pattern is not used to determine Gleason score.

Example*:* If the patterns are 2 + 4, the score is 6.

If the pathology report contains only one number, and that number is less than or equal to 5, it is a pattern.
If the pathology report contains only one number, and that number is greater than 5, it is a score.
If the pathology report specifies a specific number out of a total of 10, the first number given is the score.

Example 1: The pathology report says “Gleason 3/10”. The Gleason’s score would be 3.

Example 2: The pathology report states 7(3 + 4). Gleason score is 7. Primary pattern is 3 and secondary pattern is 4.

If there are **two numbers other than 10**, assume they refer to two patterns. The first number is the primary pattern and the second is the secondary pattern.

Example: If the pathology report says “Gleason 3 + 5,” the Gleason score would be 8.

Use the following table to convert Gleason pattern or score into SEER code.

Gleason Conversion Table

Gleason Score	Gleason Pattern	Histologic Grade	Terminology	SEER Code
2, 3, 4	1, 2	I	Well differentiated	1
5, 6	3	II	Moderately differentiated	2
7, 8, 9, 10	4, 5	III	Poorly differentiated	3

Note: Code 7 was moved from Moderately differentiated to Poorly differentiated, effective with cases diagnosed on or after 01/01/2003.

Coding Guidelines
RENAL PELVIS AND URETER
Renal Pelvis C659, Ureter C669

Laterality

Laterality is required for sites C65.9 and C66.9.

Grade

Note: These guidelines pertain to the data item Grade. Refer to the *Collaborative Stage Data Collection Manual* for instructions on coding site-specific factors.

Urothelial carcinomas are graded as either low grade or high grade according to the WHO/ISUP grading system. The WHO/ISUP grade is captured as a Site Specific Factor in the Collaborative Stage Data Collection System. Do **not** convert WHO/ISUP grade to the SEER code for grade.

Urothelial Carcinoma
- Low grade
- High grade

Adenocarcinoma and Squamous Cell Carcinoma
- Grade 1 Well differentiated
- Grade 2 Moderately differentiated
- Grade 3 Poorly differentiated

Coding Guidelines
URETHRA
C680

Grade

Note: These guidelines pertain to the data item Grade. Refer to the *Collaborative Stage Data Collection Manual* for instructions on coding site-specific factors.

Adenocarcinoma and Squamous Cell Carcinoma
Assign the grade code for adenocarcinoma and squamous cell carcinoma.

Grade 1	Well differentiated
Grade 2	Moderately differentiated
Grade 3	Poorly differentiated

WHO/ISUP Grade
Do **not** convert WHO/ISUP grade to the SEER code for grade.

Urothelial carcinomas are graded as either low grade or high grade according to the WHO/ISUP grading system. The WHO/ISUP grade is captured as a Site Specific Factor in the *Collaborative Stage Data Collection System*.

First Course of Therapy

Do not code Lupron as treatment for a primary in the prostatic urethra.

The following pages are from documents that were distributed for use with cases diagnosed in 2014 and 2015.

To: The Cancer Registry Community

From: CoC-SEER-NPCR Technical Working Group

Date: 21 November 2013

Subject: Grade coding instructions to be implemented for cases diagnosed 1 January 2014+

The coding of grade (**GRADE, DIFFERENTIATION OR CELL INDICATOR [NAACCR Item #: 440])** has become complicated over time by the introduction of specialized site-specific grading systems. In addition, the coding instructions listed in CoC's FORDS Manual and SEER's Coding Manual differed. Therefore, a small group has been meeting to see if a consensus on grade could be reached among CoC, SEER, and NPCR. The consensus decision was to draft a set of instructions that were simpler, the same among all 3 groups, and in the end, were different from CoC's or SEER's previous instructions. Separate documentation will be produced later to outline these differences.

The 'Instructions for Coding Grade' can be found at http://seer.cancer.gov/tools/grade/ and are to be implemented for cases diagnosed 1 January 2014 and forward for CoC, SEER, and NPCR. CoC and SEER will incorporate these instructions into their respective coding manuals for 2014. CoC, SEER, and NPCR will notify their respective constituents of their general coding instructions for 2014 including grade.

No codes have been added or deleted. Vendors will not be required to make any changes to software. However, vendors may be able to implement some of the grading instructions electronically to aid cancer registrars in coding the grade field.

Educational materials/presentations will be developed. Short articles/announcements are being developed to highlight some of the changes.

The impact of these new instructions on the analyses of grade trends over time may be substantial for some sites especially prostate. It was difficult to balance changing rules with a desire to keep grade trends intact. For prostate, however, earlier changes based on 'current at the time' AJCC/UICC rules had already wreaked havoc on trying to analyze prostate grade trends.

Many thanks to those who reviewed the instructions. Your comments and questions were very helpful.

The members of the CoC-SEER-NPCR Technical Working Group who drafted this document were Margaret Adamo (NCI-SEER), Mary Lewis (CDC-NPCR), Jerri Linn Phillips (CoC), Joan Phillips (CDC-NPCR), Lynn Ries (NCI contractor), Jennifer Ruhl (NCI-SEER), and Shannon Vann (NAACCR).

Instructions for Coding Grade for 2014+

GRADE, DIFFERENTIATION OR CELL INDICATOR
Item Length: 1
NAACCR Item #: 440
NAACCR Name: Grade
Grade, Differentiation for solid tumors (Codes 1, 2, 3, 4, 9) and Cell Indicator for Lymphoid Neoplasms (Codes 5, 6, 7, 8, 9)
Note: These instructions pertain to the data item Grade, Differentiation or Cell Indicator.

These are coding instructions for **cases diagnosed 1/1/2014** and forward.

Hematopoietic and Lymphoid Neoplasms

Cell Indicator (Codes 5, 6, 7, 8, 9)

Cell Indicator (Codes 5, 6, 7, 8) describes the lineage or phenotype of the cell. Codes 5, 6, 7, and 8 are used only for hematopoietic and lymphoid neoplasms. Code 9 indicates cell type not determined, not stated, or not applicable.

Coding Grade for Hematopoietic and Lymphoid Neoplasms

1. Determine the histology based on the current Hematopoietic and Lymphoid Neoplasm Manual [http://seer.cancer.gov/tools/heme/Hematopoietic_Instructions_and_Rules/].

2. Determine the Cell Indicator by applying the "Grade of Tumor Rules" within the current Hematopoietic and Lymphoid Neoplasm Manual [http://seer.cancer.gov/tools/heme/Hematopoietic_Instructions_and_Rules/] to code the grade.

   Grade codes for hematopoietic and lymphoid neoplasms

Terminology	Grade Code
T-cell; T-precursor	5
B-Cell; Pre-B; B-precursor	6
Null cell; Non T-non B	7
NK cell (natural killer cell)	8
Grade unknown, not stated, or not applicable	9

Solid tumors

Grade, Differentiation (Codes 1, 2, 3, 4, 9)

Pathologic examination determines the grade, or degree of differentiation, of the tumor. For these cancers, the grade is a measurement of how closely the tumor cells resemble the parent tissue (organ of origin). Well-differentiated tumor cells closely resemble the tissue from the organ of origin. Poorly differentiated and undifferentiated tumor cells are disorganized and abnormal looking; they bear little

(poorly differentiated) or no (undifferentiated) resemblance to the tissue from the organ of origin. These similarities/differences may be based on pattern (architecture), cytology, nuclear (or nucleolar) features, or a combination of these elements, depending upon the grading system that is used. Some grading systems use only pattern, for example Gleason grading in prostate. Others use only a nuclear grade (usually size, amount of chromatin, degree of irregularity, and mitotic activity). Fuhrman's grade for kidney is based only on nuclear features. Most systems use a combination of pattern and cytologic and nuclear features; for example Nottingham's for breast combines numbers for pattern, nuclear size and shape, and mitotic activity. The information from this data item is useful for determining prognosis and treatment.

Pathologists describe the tumor grade using three systems or formats:

1. Two levels of similarity; also called a two-grade system
2. Three levels of similarity; also called a three-grade system (code according to "Coding for solid tumors."
    a. Grade I, well
    b. Grade II, moderately
    c. Grade III, poorly (undifferentiated carcinoma is usually separated from this system, since "poorly" bears some, albeit little, similarity to the host tissue, while "undifferentiated" has none, e.g. Undifferentiated carcinoma).
3. Four levels of similarity; also called a four-grade system. The four-grade system describes the tumor as
    a. Grade I; also called well-differentiated
    b. Grade II; also called moderately differentiated
    c. Grade III; also called poorly differentiated
    d. Grade IV; also called undifferentiated or anaplastic

Breast and prostate grades may convert differently than other sites. These exceptions are noted in "Coding for Solid Tumors", #7-8 below.

Coding for Solid Tumors

1. Systemic treatment and radiation can alter a tumor's grade. Therefore, it is important to code grade based on information prior to neoadjuvant therapy even if grade is unknown.

2. Code the grade from the primary tumor only.
    a. Do NOT code grade based on metastatic tumor or recurrence. In the rare instance that tumor tissue extends contiguously to an adjacent site and tissue from the primary site is not available, code grade from the contiguous site.
    b. If primary site is unknown, code grade to 9.

3. Code the grade shown below (6th digit) for specific histologic terms that imply a grade.
    Carcinoma, undifferentiated (8020/34)
    Carcinoma, anaplastic (8021/34)
    Follicular adenocarcinoma, well differentiated (8331/31)
    Thymic carcinoma, well differentiated (8585/31)
    Sertoli-Leydig cell tumor, poorly differentiated (8631/33)
    Sertoli-Leydig cell tumor, poorly differentiated with heterologous elements (8634/33)
    Undifferentiated sarcoma (8805/34)

Liposarcoma, well differentiated (8851/31)
Seminoma, anaplastic (9062/34)
Malignant teratoma, undifferentiated (9082/34)
Malignant teratoma, intermediate type (9083/32)
Intraosseous osteosarcoma, well differentiated (9187/31)
Astrocytoma, anaplastic (9401/34)
Oligodendroglioma, anaplastic (9451/34)
Retinoblastoma, differentiated (9511/31)
Retinoblastoma, undifferentiated (9512/34)

4. In situ and/or combined in situ/invasive components:
   a. If a grade is given for an in situ tumor, code it. Do NOT code grade for dysplasia such as high grade dysplasia.
   b. If there are both in situ and invasive components, code only the grade for the invasive portion even if its grade is unknown.

5. If there is more than one grade, code the highest grade within the applicable system. Code the highest grade even if it is only a focus. Code grade in the following priority order using the first applicable system:
   a. special grade systems for the sites listed in Coding for Solid Tumors #6
   b. differentiation: use Coding for Solid Tumors #7: 2-, 3-, or 4- grade system
   c. nuclear grade: use Coding for Solid Tumors #7: 2-, 3-, or 4- grade system
   d. If it isn't clear whether it is a differentiation or nuclear grade and a 2-, 3-, or 4- grade system was used, code it.
   e. Terminology (use Coding for Solid Tumors #8)

6. Use the information from the special grade systems first. If no special grade can be coded, continue with Coding for Solid Tumors #7-9.

Special grade systems for solid tumors

Grade information based on CS Site-specific factors for breast, prostate, heart, mediastinum, peritoneum, retroperitoneum, soft tissue, and kidney parenchyma is used to code grade. See **Special Grade System Rules** section below for details on how to use this information to code grade.

CS Schema	Special grade system
Breast	Nottingham or Bloom-Richardson (BR) Score/Grade (SSF7)
Prostate	Gleason's Score on Needle Core Biopsy/Transurethral Resection of Prostate (TURP) (SSF 8)
Prostate	Gleason's Score on Prostatectomy/Autopsy (SSF 10)
Heart, Mediastinum	Grade for Sarcomas (SSF 1)
Peritoneum	Grade for Sarcomas (SSF 1)
Retroperitoneum	Grade for Sarcomas (SSF 1)
Soft Tissue	Grade for Sarcomas (SSF 1)
Kidney Parenchyma	Fuhrman Nuclear Grade (SSF 6)

Do not use these tables to code grade for any other groups including WHO (CNS tumors), WHO/ISUP (bladder, renal pelvis), or FIGO (female gynecologic sites) grades.

7. Use the Two-, Three- or Four-grade system information

a. Two-grade system

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

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

b. Three-grade system

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

c. Four-grade system: Any four-grade system including Edmondson and Steiner grade for liver.

Term	Description	Grade Code
1/4	Grade I; Well differentiated	1
2/4	Grade II; Moderately differentiated	2
3/4	Grade III; Poorly differentiated	3
4/4	Grade IV; Undifferentiated	4

8. Terminology: use the 'Description' column or the 'Grade' column to code grade. Breast & Prostate use the same grade code with a few noted exceptions.

Description	Grade	Assign Grade Code	Exception for Breast and Prostate Grade Code
Differentiated, NOS	I	1	
Well differentiated	I	1	
Only stated as 'Grade I'	I	1	
Fairly well differentiated	II	2	
Intermediate differentiation	II	2	
Low grade	I-II	2	1
Mid differentiated	II	2	
Moderately differentiated	II	2	
Moderately well differentiated	II	2	
Partially differentiated	II	2	
Partially well differentiated	I-II	2	1
Relatively or generally well differentiated	II	2	
Only stated as 'Grade II'	II	2	

Description	Grade	Assign Grade Code	Exception for Breast and Prostate Grade Code
Medium grade, intermediate grade	II-III	3	2
Moderately poorly differentiated	III	3	
Moderately undifferentiated	III	3	
Poorly differentiated	III	3	
Relatively poorly differentiated	III	3	
Relatively undifferentiated	III	3	
Slightly differentiated	III	3	
Dedifferentiated	III	3	
Only stated as 'Grade III'	III	3	
High grade	III-IV	4	3
Undifferentiated, anaplastic, not differentiated	IV	4	
Only stated as 'Grade IV'	IV	4	
Non-high grade		9	

9. If no description fits or grade is unknown prior to neoadjuvant therapy, code as a 9 (unknown).

SPECIAL GRADE SYSTEMS RULES

Breast (site: breast excluding lymphomas; CS schema: breast)

Use Bloom Richardson (BR) or Nottingham score/grade to code grade based on CSv2 site-specific factor 7 (SSF) as stated below. If your registry does not collect this SSF, use the description in the table below to determine grade. If you collect this SSF, codes 030-130 could be automatically converted into the grade field.

BR could also be referred to as: Bloom-Richardson, modified Bloom-Richardson, BR, BR grading, Scarff-Bloom-Richardson, SBR grading, Elston-Ellis modification of Bloom-Richardson score, Nottingham modification of Bloom-Richardson score, Nottingham modification of Scarff-Bloom-Richardson, Nottingham-Tenovus grade, or Nottingham grade.

Code the tumor grade using the following priority order

a. BR scores 3-9
b. BR grade (low, intermediate, high)

BR score may be expressed as a range, 3-9. The score is based on three morphologic features: degree of tubule formation/histologic grade, mitotic activity, nuclear pleomorphism/nuclear grade of tumor cells. If a report uses words such as low, intermediate, or high rather than numbers, use the table below to code grade.

If only a grade of 1 through 4 is given with no information on the score and it is unclear if it is a Nottingham or BR Grade, do not use the table below. Continue with the next priority according to "Coding for Solid Tumors" #7 above.

Code the highest score if multiple scores are reported (exclude scores from tests after neoadjuvant therapy began). Examples: different scores may be reported on multiple pathology reports for the same primary cancer; different scores may be reported for multiple tumors assigned to the same primary cancer.

CS Site-Specific Factor 7
Nottingham or Bloom-Richardson (BR) Score/Grade

Description	CS Code	Grade Code
Score of 3	030	1
Score of 4	040	1
Score of 5	050	1
Score of 6	060	2
Score of 7	070	2
Score of 8	080	3
Score of 9	090	3
Low Grade, Bloom-Richardson (BR) grade 1, score not given	110	1
Medium (Intermediate) Grade, BR grade 2, score not given	120	2
High Grade, BR grade 3, score not given	130	3

Kidney Parenchyma (Site: kidney parenchyma excluding lymphomas; CS schema: KidneyParenchyma): Fuhrman Nuclear Grade

The Fuhrman Nuclear Grade should be used to code grade for kidney parenchyma only based on CSv2 SSF 6 as stated below. Do not use for kidney renal pelvis. If your registry does not collect this SSF, use the description in the table to determine grade. If you collect this SSF, the information could be automatically converted into the grade field if it is coded 010-040. Fuhrman nuclear grade is a four-grade system based on nuclear diameter and shape, the prominence of nucleoli, and the presence of chromatin clumping in the highest grade.

Description	CS Code	Grade Code
Grade 1	010	1
Grade 2	020	2
Grade 3	030	3
Grade 4	040	4

SoftTissue (sites excluding lymphomas: soft tissue, heart, mediastinum, peritoneum, and retroperitoneum; for CS users: SoftTissue, HeartMediastinum, Peritoneum, Retroperitoneum schemas): Grade for Sarcomas

The Grade for Sarcomas should be used to code grade based on CSv2 SSF 1 as stated below. If your registry does not collect this SSF, use the description in the table to determine grade. If you collect this SSF, the information could be automatically converted into the grade field if it is coded 010-200. The grading system of the French Federation of Cancer Centers Sarcoma Group (FNCLCC) is the preferred system.

Record the grade from any three-grade sarcoma grading system the pathologist uses. For terms such as "well differentiated" or "poorly differentiated," go to Coding for Solid Tumors #8.

In some cases, especially for needle biopsies, grade may be specified only as "low grade" or "high grade." The numeric grade takes precedence over “low grade” or “high grade.”

Description	CS Code	Grade Code
Specified as Grade 1 [of 3]	010	2
Specified as Grade 2 [of 3]	020	3
Specified as Grade 3 [of 3]	030	4
Grade stated as low grade, NOS	100	2
Grade stated as high grade, NOS	200	4

Prostate (site: prostate excluding lymphomas; CS schema: prostate)

Use the highest Gleason score from the biopsy/TURP or prostatectomy/autopsy. Use a known value over an unknown value. Exclude results from tests performed after neoadjuvant therapy began. This information is collected in CSv2 SSF 8 (Gleason score from biopsy/TURP) and SSF 10 (Gleason score from prostatectomy/autopsy) as stated below. Use the table below to determine grade even if your registry does not collect these SSFs. If you collect these SSFs, the information could be converted into the grade field automatically.

Usually prostate cancers are graded using Gleason score or pattern. Gleason grading for prostate primaries is based on a 5-component system (5 histologic patterns). Prostatic cancer generally shows two main histologic patterns. The primary pattern, the pattern occupying greater than 50% of the cancer, is usually indicated by the first number of the Gleason grade, and the secondary pattern is usually indicated by the second number. These two numbers are added together to create a pattern score, ranging from 2 to 10. If there are two numbers, assume that they refer to two patterns (the first number being the primary pattern and the second number the secondary pattern), and sum them to obtain the score. If only one number is given on a particular test and it is less than or equal to 5 and not specified as a score, do not use the information because it could refer to either a score or a grade. If only one number is given and it is greater than 5, assume that it is a score and use it. If the pathology report specifies a specific number out of a total of 10, the first number given is the score. Example: The pathology report says Gleason 3/10. The Gleason score would be 3.

Historic Perspective

Gleason score	Description					
	CS Code	Grade Code	AJCC 7th	SEER 2003-2013	AJCC 6th	SEER prior 2003
2	002	1	G1	G1	G1	G1
3	003	1	G1	G1	G1	G1
4	004	1	G1	G1	G1	G1
5	005	1	G1	G2	G2	G2
6	006	1	G1	G2	G2	G2
7	007	2	G2	G3	G3	G2
8	008	3	G3	G3	G3	G3
9	009	3	G3	G3	G3	G3
10	010	3	G3	G3	G3	G3

Historical perspective on long term trends in prostate grade: The relationship of Gleason score to grade changed for 1/1/2014+ diagnoses in order to have the grade field in sync with AJCC 7th ed. Analysis of prostate grade before 2014 based solely on the grade field is not recommended. In Collaborative Stage (CS), Gleason score was originally coded in CSv1 in one field (SSF 6) and then it was split into two fields in CSv2 based on the tissue used for the test: needle biopsy/TURP (SSF 8) and prostatectomy/autopsy (SSF 10). For trends using data back to 2004, if one collected the various CS Gleason scores, one could design a recode to have the same criteria as the data collected 2014+. The original grade field would NOT be changed, but for analyses this recode could be based on the CS SSFs and the original grade code.

Computer algorithm to derive grade for prostate based on SSF 8 and SSF 10: if SSF 8 or SSF 10 has known values for Gleason's, the information could be used to automatically derive the grade field.

SSF 8 Code	SSF 10 Grade Code											
	002	003	004	005	006	007	008	009	010	988	998	999
002	1	1	1	1	1	2	3	3	3	*	1	1
003	1	1	1	1	1	2	3	3	3	*	1	1
004	1	1	1	1	1	2	3	3	3	*	1	1
005	1	1	1	1	1	2	3	3	3	*	1	1
006	1	1	1	1	1	2	3	3	3	*	1	1
007	2	2	2	2	2	2	3	3	3	*	2	2
008	3	3	3	3	3	3	3	3	3	*	3	3
009	3	3	3	3	3	3	3	3	3	*	3	3
010	3	3	3	3	3	3	3	3	3	*	3	3
988	*	*	*	*	*	*	*	*	*	*	*	*
998	1	1	1	1	1	2	3	3	3	*	*	*
999	1	1	1	1	1	2	3	3	3	*	*	*

* Grade can't be automatically calculated based on SSF 8 and SSF 10; Go to Step 7