CODING and BILLING for NEUROSONOLOGY

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Coding and Billing for Neurosonology

- Clinical considerations
- Reimbursement
- Neurosonology CPT Coding and ICD-10
- Ordering Requirements
- Lab/Facility/Personnel Accreditation

Clinical Considerations

- Stroke, TIA and delayed consequences of cerebral ischemia remain common entities in ambulatory neurology practice
- Compelling indications for neurovascular testing include stroke, TIA, ocular ischemia. Tinnitus, dizziness/vertigo also represent complaints whereby TCD and CD may be indicated and justified
- The consequences of not performing such usual customary and reasonable medical maneuvers must be considered

CLINICAL CONSIDERATIONS

Clinical Considerations (cont)

• Different ICU:

- NeuroCritical Care
 - SAH, TBI, Acute Stroke, Cryptogenic Stroke, Encephalopathy, Brain Death and many more...
- Pediatric
- Cardiac
- Medical

REIMBURSEMENT

Reimbursement Major "Players"

- AMA is American Medical Association
- CMS is Center for Medicare Services
- MAC is Medicare Administrative Contractor
- CAC is Carrier Advisory Committee
- LCD or Local Coverage Determination

AMA CPT PHYSCIANS' CURRENT PROCEDURAL TERMINOLOGY (CPT)

- AMA CPT Editorial Panel
 - 18 Members including an AMA Secretary
- AMA CPT Advisory Committee
 94 Professional Associations
- AMA HCPAC
 18 Professional Associations
- General Correspondence

What is a MAC and what do they do?

- A Medicare Administrative Contractor (MAC) is a private health care insurer (e.g. BCBS or Aetna) that has been awarded a geographic jurisdiction to process Medicare Part A and B (A/B) medical claims or Durable Medical Equipment (DME) claims for Medicare Fee-For-Service (FFS) beneficiaries
- CMS relies on a network of MACs to serve as the <u>primary operational</u> contact between the Medicare FFS program and the health care providers enrolled in the program. MACs are multi-state, regional contractors responsible for administering both Medicare Part A and B claims

MACs perform many activities

- Process Medicare FFS claims
- Make and account for Medicare FFS payments
- Enroll providers in the Medicare FFS program
- Handle provider reimbursement services and audit institutional provider cost reports
- Handle redetermination requests (1st stage appeals process)
- Respond to provider inquiries
- Educate providers about Medicare FFS billing requirements
- Establish local coverage determinations (LCD's)
- Review medical records for selected claims
- Coordinate with CMS and other FFS contractors

Carrier Advisory Committee (CAC)

- MACs are required to establish a Carrier Advisory Committee (CAC) for each state. For states that currently have multiple MACs, a joint CAC will be established
- CACs have the opportunity to:
 - Discuss draft Local Coverage Determinations (LCDs)
 - Provide input and comment on draft policies
 - Improve the relationship between Medicare and the provider community
- The CACs should meet at least three times a year

Carrier Advisory Committee (CAC)

- CAC for each Medicare regional carrier
- Many reimbursement problems result from lack of knowledge, understanding of issues
- CAC Advises Medical Director regarding LMRP/LCD
- CAC made up of reps from State Medical Societies and others
- Know your CAC specialty rep, or get involved yourself

Local Coverage Determinations (LCD)

- Each MAC is responsible for developing coverage policies within their jurisdiction. These policies are called Local Coverage Determinations (LCDs)
- An LCD is a tool that assists providers in submitting correct claims for items and services by describing the clinical circumstances under which a service is covered by Medicare (i.e., considered "reasonable and necessary")
- MACs are required to develop uniform LCDs for all the states in their assigned jurisdiction. Newly-awarded MACs can consolidate all of the local coverage policies for each state into new local coverage policies for the MAC based on the "least restrictive" coverage policies

LCD

- LCD's -Medicare payer policies that identify circumstances under which services will be (or will not be) considered covered, correctly coded, and *possibly* reimbursed
- Nothing is more important to maximizing legitimate vascular lab reimbursement than knowing, understanding, and complying with LCD provisions!

LCD's -Medicare payer policies that identify circumstances, like:

- Technical Staff Credentialing
- Facility Accreditation Types of exams not
- Physician Qualifications
- Diagnosis codes considered medically necessary
- Types of exams covered
 - covered
- Frequency of repeat exams
- Documentation
- requirements

Certification/Accreditation

- Vascular studies must be:
- 1. performed by or under direct supervision of credentialed persons
 - OR
 - 2. performed in accredited lab
 - Examples of appropriate certification/accreditation: ARDMS RVT, CCI RVS, ARRT(VS) and organizations like ICAVL or ACR
- "All credentialed laboratories extending their noninvasive vascular testing to include additional CPT codes have 12 months to become accredited for the new CPT codes. It is expected that all labs, after receiving accreditation, maintain credentialed personnel on staff to perform and supervise these procedures. Laboratory accreditation should be specific to the testing being performed."

Problems with LCD

- Local not used in every state
- Applied to more lab settings than ever before
- Hospital labs are especially unaware
- Certification/Accreditation requirements may have significant impact on who can take call
- Frequent changes due to MCR* (Medical Cost Ratio) contractor reform

* Medical Cost Ratio: The medical cost ratio is a ratio that compares a health insurance company's healthcare-related costs to its revenues

Problems with LCD (cont)

- Small specialties have little representation on CAC's (Contractor Advisory Committees)
- Often poorly written incomplete, contradictory, inaccurate, nonsensical, exhibit poor understanding of "real" practice and clinical utilization
- Constant vigilance required

LCD Title: Non-Invasive Cerebrovascular Arterial Studies Indications and Limitations of Coverage and/or Medical Necessity

- The accuracy of noninvasive vascular diagnostic studies depends on the knowledge, skill, and experience of the technologist and physician performing and interpreting the study
- Consequently, the physician performing and/or interpreting the study must be capable of demonstrating documented training and experience and maintain any applicable documentation
- A vascular diagnostic study may be personally performed by a physician or a technologist

LCD Title: Non-Invasive Cerebrovascular Arterial Studies

Indications and Limitations of Coverage and/or Medical Necessity

- All non-invasive vascular diagnostic studies performed by a technologist must be performed by, or under the direct supervision of, a technologist who has demonstrated competency by being credentialed in vascular technology, or, such studies must be performed in a facility accredited by the Intersocietal Commission for the Accreditation of Vascular Laboratories (ICAVL) or the Non-Invasive Vascular Ultrasound Accreditation of the American College of Radiology (ACR)
- Examples of appropriate certification include the Registered Vascular Technologist (RVT) credential, and Registered Vascular Specialist (RVS) in Vascular Technology. Direct supervision requires the credentialed individual's presence in the facility and immediate availability to the technologist performing the study

LCD Information resource

- http://www.cms.hhs.gov/mcd/index_Imrp_bystate_criteria.asp?from2=index_Imrp_bystate_criteria.asp&
- Before you start, determine your MAC, Carrier, FI
- Select state name
- Select Part A (inpatient) or Part B (outpatient)
- Accept License Agreement
- Check the box for "ALL" policies, and review "Active," Draft", and "Future" LCD's
- Check frequently for updates, changes

Economics

Payment will vary by geographic regions

- 2020 for Medicare physician fee schedule (MPFS) and facility payment rates
- CPT 93886 TCD study of the intracranial arteries; complete study:
 - 2020 for location 1220201 DC+MD/VA suburbs Professional \$58.95
 - Professional
 \$ 58.95

 Technical
 \$ 305.74 (OPPS \$284.90)

2020 for location 1150200 North Carolina Professional \$ 51.60

Technical

\$ 51.60 \$ 232.70 (OPPS \$216.96)

OPPS - Outpatient Prospective Payment System

- Section 5102(b) of the Deficit Reduction Act of 2005 requires a payment cap on the technical component (TC) of certain diagnostic <u>imaging</u> procedures and the TC portions of the global diagnostic imaging services
- This cap is based on the Outpatient Prospective Payment System (OPPS) payment. To implement this provision, the physician fee schedule amount is compared to the OPPS payment amount and the lower amount is used for payment
- In 2005 new directive from CMS decrease TCD reimbursement by 30% (imaging & non-imaging)

Physician Fee Schedule

- https://www.cms.gov/apps/physician-feeschedule/license-agreement.aspx
- Type of Information (pricing information, relative value units, etc.)
- Select Healthcare Common Procedure Coding System (HCPCS) Criteria (single CPT, list or range of CPT, etc.)
- Select Medicare Administrative Contractor (MAC) Option (National Payment Amount, Specific MAC, Specific Locality, etc.)
- Modifier (global, professional, technical)

NEUROSONOLOGY CPT CODING AND ICD-10

Coding and Regulatory Issues

- Correct coding is fundamental to successful operation
- Proper diagnosis codes for ICD-10* must match CPT procedure codes
- Proper coding assures accurate and prompt processing of claims
- * International Classification of Diseases of the World Health Organization, 10th revision

Neurosonology CPT Codes

- <u>93875</u> Physiological testing extracranial arteries, complete bilateral study
- <u>93880</u> Duplex scan extracranial arteries, complete bilateral study
- <u>93882</u> Limited or unilateral duplex
- <u>93886</u> TCD intracranial, complete study
- <u>93888</u> TCD intracranial limited study
- <u>93890</u> Vasoreactivity study
- <u>93892</u> Embolus Detection without bubbles
- 93893 Embolus Detection with bubbles

CPT Code for Intima Media Thickness (IMT)

• 93895: Quantitative carotid IMT and carotid atheroma evaluation, bilateral

CPT Code for IMT

- Measurement of carotid IMT refers to the use of B-mode ultrasound to determine the thickness of the 2 innermost layers of the carotid artery wall, the intima and the media. Detection and monitoring of IMT, which is a surrogate marker for atherosclerosis, may provide an opportunity to intervene earlier and/or monitor disease progression
- There is a category III CPT code^{*} specific to this testing: 0126T: CIMT study for evaluation of atherosclerotic burden or coronary heart disease risk factor assessment. It is possible that providers might incorrectly use CPT code 93880, which describes bilateral duplex scan of extracranial arteries

* Category III CPT Codes are temporary codes for emerging technology, services and procedures that allow for specific data collection associated with those services and procedures. There are no assigned RVU's or established payment for the Category II CPT codes

Definition of Complete and Limited TCD study

- A complete TCD evaluation includes ultrasound examination of the right and left anterior circulation, inlcuding OAs and carotid siphon bilaterally, and the posterior circulation, including the vertebral arteries and basilar artery
- A limited TCD evaluation includes two or less of the above mentioned areas

WORK IN PROGRESS New CPT Code/s for TCD

- TCD CPT Code for monitoring in Operating Room
- TCD CPT Code for monitoring in ICU
- TCD CPT Code for monitoring in interventional suits

Accurate CPT Coding: IMPORTANT!!!

- Read the CPT book
- Be sure that your facility (technologist, coder) understands how to code vascular exams
- Remember you may know more about the patient, vascular testing. and vascular diagnoses than the "official" coder
- Don't completely trust your EMR vendor for coding advice

The Report Must Fully Support the CPT Code on the Claim

Example 1:

Billing CPT Code 93880 (Duplex scan extracranial arteries, complete bilateral study) and report reads "70% stenosis of the right extracranial ICA"

• Example 2:

Billing CPT Code 93886 (TCD complete) and report reads "no evidence of intracranial ICA dissection"

ICD-10 Codes

ICD - International Classification of Diseases

- Published by WHO
- MD's required to use for MCR (Medical Care Reimbursement) deduction since 04-01-1989

Purposes:

- Describe medical necessity of a procedure
- Facilitate payment of health services
- Evaluate utilization patterns
- Permit study of appropriateness of health care costs
- Serve as basis for epidemiological studies
- Serve as basis for research into health care quality

ICD-10 Coding Rules

- Know the definition of the ICD-10 Code
- The patient's clinical condition, history, or the test results must meet the definition of the ICD-10 Code (Diagnosis Code) on the claim
- The exam documentation (Report) must fully support the ICD-10 Code on the claim

Know the Definition of the ICD-10 Codes

- ICD-10-CM Codes > IC0-IB9 Cerebrovascular diseases > Cerebrovascular diseases I60-I69
 Cerebrovascular diseases I60-I69:
- 160 Non-traumatic subarachnoid hemorrhage
- I61 Non-traumatic intracerebral hemorrhage
- I62 Other and unspecified non-traumatic intracranial hemorrhage
- 63 Cerebral infarction
- IG5 Occlusion and stenosis of pre-cerebral arteries, not resulting in cerebral infarction
- IGG Occlusion and stenosis of cerebral arteries, not resulting in cerebral infarction
- many more

ICD-10 Codes

- Code the diagnosis, symptoms, conditions or reasons responsible for the service being provided
- Code a confirmed or definitive diagnoses documented by the diagnostic test
- Do not use the initial "referral" indication if it is inaccurate
- Choose the ICD-10 code that provides the highest degree of accuracy and completeness
- Can not use "rule out", "suspected", "probable", or "questionable" on *outpatients*

Neurosonology ICD Codes

- ICD coding is crucial
- ICD Codes are diagnosis codes that may support medical necessity for CPT code
- Acceptable codes vary between carriers
- Listed in LMRP/LCD for Medicare Carrier
 Must learn/know what is acceptable, and know denial and appeal policies
- Algorithms can be helpful

Neurosonology ICD Codes

- Code based on known clinical diagnosis (i.e. stroke)
- If no clear Diagnosis, list ICD code based on symptom/sign
- If no clue, contact referring Dr/office
- Can code based on apparent indication, whether test is abnormal or not!
- Make sure codes are transmitted to billing office, and included in submission; plug the holes in the bucket

Acceptable ICD-10 Codes for TCD per Medicare

| 282.5 | Sickle cell trait |
|----------------|---|
| 282.6-282.69 | Sickle cell anemia |
| 348.8 | Other condition of brain brain death |
| 430 | SAH |
| 433.00- 433.01 | Occlusion/stenosis basilar artery (without/with |
| 433.10- 433.11 | stroke) |
| 433.20- 433.21 | Occlusion/stenosis carotid artery (without/with |
| 434.00- 434.91 | Opelusion/stangeis.vert. Arteru. (without/with |
| 434.01, 434.11 | stroke) |
| 435.9 | Occlusion of cerebral arteries |
| 436 | Cerebral thrombosis, cardioembolic stroke |
| 447.1 | Unspecified transient cerebral ischemia (TIA) |
| 747.81 | Acute, ill-defined cerebrovascular disease |

ICD/CPT Codes and LMRP/LCD

- Medicare Local Medical Review Policies/Local Carrier Directives (LMRP/Local Coverage Determination or LCD) address and update tests (CPT) and indications (ICD)
- Current LMRP/LCD's available on line; check your local/regional carrier, i.e. MD Medicare (Highmark)
- Influences Medicaid and other payers, but they may be different

CPT/ICD Codes

- Frustrating but mandatory
- Day to day is local issue, but must be aware and proactive for national issues
- LMRP/LCD Policies vary by state/carrier
- Know and use your society representation (AIUM, ASN, ACR, etc)
- Don't just gripe; Get Involved!

ICD-10 Resource https://www.icd10data.com

- ICD10data.com is a free reference website designed for the fast lookup of all current American ICD-10-CM (diagnosis, Clinical Modification) and ICD-10-PCS (Procedure Coding System) medical billing codes
- The 2021 ICD-10-CM/PCS code sets are now fully loaded on ICD10Data.com
- 2021 codes became effective on October 1, 2020, therefore all claims with a date of service on or after this date should use 2021 codes

ORDERING REQUIREMENTS

Orders

- Diagnostic tests must have orders from "Treating Physician/Practitioner"
- What test?
- Why?
- Ordering physician must document intent to order and reason for exam
- Maintain copies of orders in case of audit
- Follow regulations for additional/un-ordered tests

Definition of Treating Physician/Practioner

• A physician /practitioner as defined under the SS Act

- Who treats for a specific medical problem OR
- Who furnishes a consultation AND
- Who uses the results of the diagnostic test in the management of the specific medical problem

Order Forms

- Demographics
- Clearly defined space for type of test, indication
- Space for extra info, notes, instructions
- Avoid steering to only those diagnoses/codes that meet medical necessity
- Use as referral and marketing tool

Practical Laboratory Issues - MD Medicare Policy

- It is the <u>responsibility of the provider to ensure</u> the medical necessity of procedures and to maintain a record for possible audit
- Clinicians billing Medicare are encouraged to obtain additional information from referring providers and/or patients to determine the medical necessity of studies
- Referring physicians are required to provide appropriate diagnostic information to the performing technologist/physician

Covered Indications for TCD

- Detection of severe stenosis in the major basal intracranial arteries
- Assessment of patterns and extent of collateral circulation in patients with known regions of severe stenosis or occlusion
- Intraoperative and perioperative monitoring of intracranial flow velocity and hemodynamic patterns during carotid endarterectomy
- Detection of arteriovenous malformations and study of the supply arteries and flow patterns

Covered Indications for TCD

- Evaluation and follow-up of patients with vasoconstriction or spasm resulting from an illness, disease or injury, especially after subarachnoid hemorrhage
- As an adjunct in the assessment of patients with suspected brain death
- Evaluation of invasive therapeutic interventions for cerebral malformations
- Evaluation of cerebral embolization

Non-Covered Indications for TCD (considered investigational)

- Migraine or headaches
- Dizziness not associated with localizing symptoms.
- Evaluation of patients with dilated vasculopathies, such as fusiform aneurysms
- Assessing autoregulation, physiologic and pharmacological responses of cerebral arteries
- Evaluating children with various vasculopathies, such as Moya-Moya and neurofibromatosis
- Assessment of physiologic and pharmacologic responses of cerebral arteries

Non-Covered Indications for TCD (not medically necessary)

- Evaluation of brain tumors
- Assessment of familial and degenerative disease of the cerebrum, brainstem, cerebellum, basal ganglia and motor neurons
- Evaluation of infectious and inflammatory conditions
- Evaluation of psychiatric disorder
- Evaluation of epilepsy
- Routine evaluation of cerebrovascular symptoms and signs

Indications for Procedure Codes 93875 (physiologic studies), 93880 and 93882 (duplex scanning)

- Amaurosis fugax
- Cervical bruits
- Pulsatile neck masses
- Follow-up of patients with proven carotid disease who are receiving medical therapy
- Follow-up for postoperative patients following carotid endarterectomy
- Hemispheric neurologic symptoms of stroke
- Blunt neck trauma

Indications for Procedure Codes 93875 (physiologic studies), 93880 and 93882 (duplex scanning)

- Subclavian steal syndrome
- Focal cerebral or ocular transient ischemic attacks (i.e., localizing symptoms, weakness of one side of the face, slurred speech, weakness of a limb, ocular ischemia)
- Preoperative evaluation of selected patients scheduled for major cardiovascular surgical procedures that, because of their clinical history and/or presentation, are at increased risk of intraoperative or perioperative stroke (dual-diagnosis required; see below)
- Evaluation of suspected dissection

The Patient Clinical Condition, History, or the Test Results Must Meet the Definition of ICD-10 Code on the Claim

Example:

Patient admitted with the left side weakness of upper extremity

Billing with ICD-10 Code 166.01 Occlusion and stenosis of right middle cerebral artery and TCD report reads "TCD signs of mild stenosis of the right middle cerebral artery" or "No evidence of stenosis involving the right middle cerebral artery"

The Exam Documentation (Report) Must Fully Support the ICD-10 Code on the Claim

Example:

Billing with ICD-10 Code 166.2 <u>Occlusion and</u> <u>stenosis of left middle cerebral artery</u>, and report describes "abnormally elevated CBFV in the M1 segment of the left MCA consistent with TCD signs of severe stenosis"

Billing for Two Exams on the Same Date

Which exams

• Must not be "bundled" codes

Reasons for exams

Both exams must be medically necessary

Documentation

- Both exams must meet LCD requirements
- Both exams must meet definition of billed CPT codes
- Separate ICD-9 codes not required, but good to use, if appropriate
- Report each exam separately to reflect the separate amount of work associated with each exam

Reports

- Review your Report Forms!
- Be sure that:
 - Final Reports are complete, easy to understand
 - CMS Ordering and Signature requirements are fulfilled
 - Records are maintained as required by
 - LCD, state law, other policies
 - Report should "stand alone"

Reports

- Include space for required components of CPT code (i.e. 93886 include space for all relevant intracranial arteries)
- Don't combine documentation for two or more CPT codes on one Report form (i.e. Extracranial Carotid Duplex + TCD + IMT combined on one "Comprehensive Cerebrovascular Evaluation" Report Form)

Medical Necessity

Medical Necessity established/documented through:

Indications

- Use narrative/words, not only numerical ICD-10 code
- Be specific to **that** patient for **that** exam on that day
- Include relevant associated medical history

Impressions

- Be as specific as possible, because Impressions may change the ICD-10 coding on the claim
- Include important negative conclusions as well as positive conclusions

Reimbursement

- Amount varies widely by region
- Global fee
- Technical and Professional
- Inpatient (DRG)
- Outpatient considerations
- Impact of DRA inclusion of TCD with imaging modalities –trying to change

Keys to Reimbursement

- Correct coding of procedure done
- Correct, reimbursable diagnosis code
- Must list indication and ICD code in the report itself
- Be familiar with your local Medicare carrier medical review policy
- Know local policies for denials and appeals policy

Reports

- Review your Report Forms!
- Be sure that:
 - Final Reports are complete, easy to understand
 - CMS Ordering and Signature requirements are fulfilled
 - Records are maintained as required by LCD, state law, other policies
 - Report should "stand alone"

Reports (cont.)

- Don't use Lab-specific names for Reports
- Don't combine documentation for two or more CPT codes on one Report form
- (i.e. Extracranial Carotid Duplex + TCD + IMT combined on one "Comprehensive Cerebrovascular Evaluation" Report)

Signatures

- Provider clearly identified and legible first and last names, credentials recommended
- Time for report submission by sonographer and time for physician signatures clearly identified
 Can be handwritten or Electronic
- - Diaitized Electronic
 - Digital

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 Not acceptable: Signature stamps "Signed but not read" "Signature on File"

LAB/FACILITY ACCREDITATION

The Intersocietal Accreditation Commission (IAC) accredits imaging facilities and hospitals

specific to vascular testing IAC accreditation is a means by which facilities can evaluate and

demonstrate the level of patient care they provide



Medical Director / Medical Staff

- Required Experience and Training
 - Formal training program
 - Informal training
 - Established practice
 - RPVI credential or
 - ASN neurosonology certificate

2007 Revisions Intracranial Testing

- Transcranial Doppler (TCD) or transcranial colorcoded duplex must be provided as instrumentation
- The laboratory protocol must define the extent of power reduction to be used for transorbital examinations. For patient safety, the output power must not exceed 10% of maximum emitted power or 17 mW per cm² or equivalent measurements
- 30 correlation studies for TCD (now consistent with other areas of testing)



New Clastomers that have not previously purchased the ICANL Accreditation Materials should <u>click here</u> to create a new account to gain access to ICANL Online brought the state of the s Now available – ICAVL Online Application through IAC

Physician Certification

- No uniform mechanism for physician certification in neuro-ultrasound
- Increasingly important for hospital privileges
- AAN approved neuroimaging training guidelines for neurology residencies
 Neurology 1997; 49:1738-40

ASN and Neurosonology

- The ASN was founded in 1977 and is an international, professional organization representing neurologists, neurosurgeons, neuroradiologists and other neuroscientists dedicated to the advancement of techniques used to evaluate the nervous system
- Many of the members are involved in the performance or interpretation of neurovascular testing using carotid ultrasound, TCD and TCCD. From 1978 ASN has offered a physician certification examination in Neurosonology

ASN Certification Exam

- Tool for Physicians to show additional training/expertise
- Important if MD to also be Tech Director
- Computerized exam:
 - Principles and Physics
 Cerebrovascular extracranial
 - Cerebrovascular extracranial
 - Pediatric neurosonology (not active)

Physician Certification Eligibility for ASN Exam

- Board certified or eligible; Valid medical license
- Completed residency that meets guidelines for adequate training in neurosonology
- Verification of at least 40 hours of Category I CME in neurosonology in past 3 yrs, and of perf/interpretation of at least 100 studies of each type (carotid, TCD, pediatric) under supervision
- Details and membership info at asnweb.org

NEW Neurosonology Credential & Certificate

- Last year the ASN Board of Directors recently approved a formal credential for those who passed the ASN Neurosonology Exam
- The new credential is called the Registered Physician in Neurovascular Interpretation (RPNI) credential. Anyone who has passed the Neurosonology Exam (physics as well as carotid and/or TCD) and whose certification is in good standing may now use the RPNI letters after their name (e.g., Jane Doe, MD, RPNI).
- RPNI follows the accepted format by our vascular ultrasound colleagues
- Beginning March 2020, those who have passed the Neurosonology Examination will receive a certificate with the new RPNI credential included.

Neurosonology Practice Certifications

- ASN physician and neurosonologist exams helps for privileges, ICAVL accreditation (training for Medical Director/Staff; if must serve as Technical Director as well)
- Till 2018 sonographer certification lacks mechanism for cerebrovascular testing
- ASN created sonographer neurovascular certification exam, and introduced first time in January 2018
- 28 people have NVS certification since it's inception in 2018

ASN Regulatory Committee

- New Regulatory Committee organized in January 2019
- Objective of this committee is the following: Promote and advance clinical utilization of Neurosonology through creation of new CPT Code for TCD intraoperative monitoring for cardiovascular and cardio-thoracic surgeries by lobbying regulatory body like CMS and proper certification committees within societies like STS (Soc. of Thoracic Surgery), CTS (Cardiothoracic Surgery), SVS (Society for Vascular Surgery), AAN (American Academy of Neurology), SVU (Society of Vascular Ultrasound), ARDMS (American Registry for Diagnostic Medical Sonographers), CCI (Cardovascular Credentialing International), SDMS (Society of Diagnostic Medical Sonography), AIUM (American Institute of Ultrasound in Medicine) and ASNM (American Society for Neurophysiological Monitoring)

ADDITIONAL RESOURCES FOR INFORMATION

Key Websites for Additional Information

- American Society of Neuroimaging: <u>www.asnweb.org</u>
- American Institute of Ultrasound in Medicine: www.alum.org
- American Registry of Diagnostic Medical Sonography: www.atdms.org
- Society for Vascular Ultrasound: <u>https://www.svu.org</u>
- Cardiovascular Credentialing International: https://cdonline.org
- Neurosonology Research Group of the World Federation of Neurology: <u>www.nerg.org.iw</u>

Questions?



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