Neurosonology Training, Certification, Billing, & Coding

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Why bother?
- Lab accreditation
- Physician Certification
- Sonographer Certification
- Billing and Coding

Background
- Shrinking resources = limited reimbursement
- One mechanism is to limit payment to only certified or accredited providers
- Over 10,000 vascular labs in USA
- Needed a mechanism to insure high quality testing, appropriateness, value for $$$ spent
- 1990 ICAVL started voluntary lab accreditation

Accreditation / Certification
- Accreditation - Peer review evaluation of a laboratory/facility/practice
  - IAC (ICAVL/ICAEL/ICANL/ICAMRL/ICACTL)
  - AIUM
  - ACR
- Certification - Individual credential earned by successful completion of a written examination
  - ARDMS (RVT, RDMS, RDMS)
  - CCI (RVS, RCS)
  - ASN Physician Neurosonology Certification Examination

Laboratory Accreditation
- Noninvasive Vascular Testing
  - IAC Vascular Testing
    - Intersocietal Accreditation Commission - Vascular Testing
  - ACR
    - American college of Radiology (General Ultrasound, includes vascular testing)

Laboratory Accreditation
- Provides for quality of assurance and standardization of technique/documentation
- Important for reimbursement
- Important for patient/customer trust
- Prime Time Live Segment on Vascular Labs (Patient to multiple labs; carotid stenosis 30-80%, none found subclavian steal)
**Reimbursement**

*Will you get paid in 2013?*

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**Accreditation and Certification No Longer Voluntary**

- Move toward only reimbursing studies done in accredited labs:
  - Medicare of Virginia (2/1/98): ICAVL accreditation required for reimbursement
  - Now at least 37 states require lab accreditation (ICVL or ACR) or sonographer certification to be reimbursed by Medicare for noninvasive vascular testing services

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**ICAVL Accreditation**

- Why Was ICAVL created?
  - Lack of standardization of techniques
  - Lack of qualified personnel
  - Lack of quality assurance (correlation/confirmation of test results)
  - Threat of government intervention

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**ICAVL HISTORY**

- Incorporated in November 1990
- Not for profit organization
- Eight founding sponsors
- Develop mechanism of peer review to encourage and recognize provision of quality noninvasive vascular diagnostic evaluations
- Regularly revise standards to reflect current practice

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**ICAVL = Standardization Goals of Accreditation**

- Standardize operation
- Standardize performance
- Standardize interpretation
- Validate results

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**ICAVL ESSENTIALS AND STANDARDS**

- Accreditation now in 6 areas of testing
  - Organization
  - Extracranial Cerebrovascular
  - Intracranial Cerebrovascular
  - Peripheral Arterial
  - Peripheral Venous
  - Visceral Vascular
  - Screening now available
  - IMT Testing (Medical Screening)
Report Components = Standardize Interpretation

1. Data review
2. Contents
3. Timeliness and preliminary reports
4. Validated diagnostic criteria for interpretation

Quality Assurance

Example of “criteria” for interpretation

“If less than 50% stenosis, the single most important criteria is the gray scale appearance. When faced with > 50% stenosis, then Color Doppler plays a more prominent role in rapidly identifying specific narrowed segments. As the severity of the stenosis increases, the velocity measurement and spectral analysis become primary criteria utilized to assess percentage of stenosis.”

Validate Results = Quality Assurance/Correlation

- Procedures for regular correlation of test results with radiographic findings are provided. When radiographic correlation is unavailable, surgical and pathologic correlations are acceptable.
- Minimum correlations within 3 years
  - 30 internal carotid arteries
  - 30 peripheral arteries
  - 30 visceral vascular vessels
  - 30 intracranial vessels
  - No minimum for venous testing

What Studies Done by ICAVL Labs?

- Extracranial: 92.9%
- Peripheral Arterial: 77.7%
- Peripheral Venous: 77.2%
- Visceral Vascular: 19.5%
- Intracranial: 6.5%
- Screening: 0.6%

Template Medicare Payment Policy

For noninvasive vascular testing, diagnostic ultrasound and echocardiography procedures - all procedures must be either:

(1) performed by, or under the supervision of persons...credentialed in the specific type of procedure being performed,
or
(2) performed in laboratories accredited in the specific type of evaluation

ICAVL SPONSORS

- Vascular Surgeons - SVS/ISCVS
- Radiologists - AIUM/SCVIR/SRU
- Cardiologists - ACC
- Vascular Medicine - SVMB
- Neurologists/Neurosurgeons - AAN/ASN/AANS
- Technologists - SVT
- Sonographers – SDMS
- ACR founding sponsor, but withdrew
Medical Director / Medical Staff

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

IAC Vascular Testing

Medical Director / Medical Staff

**Formal Training**
- Appropriate residency or fellowship including interpretation under supervision at least:
  - 100 carotid duplex exams
  - 100 venous duplex exams
  - 75 visceral vascular exams

Informal Training
- 40 hours accredited post grad CME in 3 yrs
- 10 hours supervised practical experience
- Interpretation under supervision of at least:
  - 100 carotid duplex
  - 100 TCD

Established practice
- Three years experience
- Minimum number of studies - 300 per area of testing (225 visceral vascular)

Vascular Laboratory Personnel = Standardize Operations

- Must meet experience and training guidelines for *physicians* (must meet at least one of three pathways)
- Must meet training and experience guidelines for *technical personnel* (must meet at least one of four pathways)
- *ALL Technical Directors must be credentialed by 1/1/2003*

2000 Revisions

Technical Director
- Appropriate credential in vascular technology or:
  - 12 months full time vascular testing experience plus:
    - Completion of CAAHEP-approved technology program
    - Completion of 2-year allied health program
    - Bachelors degree
    - MD, DO
  - Three years experience with performance of at least 1800 exams
- *After 1/1/2003, all Technical Directors must have appropriate credential in vascular testing*
Coming soon – 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 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 intracranial
  - 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
Neursonology Practice
Certifications
- ASN physician exam helps for privileges, ICAVL accreditation (training for Medical Director/Staff; if must serve as Technical Director as well)
- ARDMS offers RPVI exam for physicians
- Sonographer certification lacks mechanism for cerebrovascular testing
- ASN working to create sonographer neurovascular certification exam

Practical Laboratory Issues - NC Medicare Policy
- It is the responsibility of the provider to ensure 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

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

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

ICD/CPT Codes and LMRP/LCD
- Medicare Local Medical Review Policies/Local Carrier Directives (LCD) address and update tests (CPT) and indications (ICD)
- Current LCD’s available on line; check your local/regional carrier, i.e. NC Medicare (was CIGNA, now Palmetto)
- Influences Medicaid and other payers, but they may be different
Prior LCD ICD-9 Codes for TCD per NC 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 stroke)
- 433.10-433.11 Occlusion/stenosis carotid artery (without/with stroke)
- 433.20-433.21 Occlusion/stenosis vert. Artery (without/with stroke)
- 434.00-434.91 Occlusion of cerebral arteries
- 434.01, 434.11 Cerebral thrombosis, cardioembolic stroke
- 435.9 Unspecified transient cerebral ischemia (TIA)
- 436 Acute, ill-defined cerebrovascular disease
- 447.1 Stenosis of intracranial artery
- 747.81 Anomalies of cerebrovascular system (AVM)

CPT/ICD Codes

- Frustrating but mandatory
- Day to day is local issue, but must be aware and proactive for national issues
- ASN and AAN part of Vascular Coalition for legislative/regulatory issues
- AAN has seat on CPT Panel
- ASN can also use AMA route if needed
- Don’t just gripe; Get Involved!

Carrier Advisory Committee

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

Reimbursement

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

Reimbursement

- Know your local Medicare Policy
- Know local policies for denials and appeals
- Appropriate documentation in reports
  - Indication for study
  - CPT code
  - ICD code

Practical Issues

- Equipment
  - Growing list of choices available
  - How instrument will be used?
  - What kind of testing?
  - Stationary vs portable
  - Clinical or research?
  - Cost
  - Big 3 (Philips, GE, Siemens)
  - Many others: Sonosite, Zonare, Medison, Biosound, Terson, etc.
**Neurosonology Practice**

- LCD Policies vary by state/carrier
- IAC Vascular Testing website ([www.intersocietal.org](http://www.intersocietal.org)) summarizes requirements for accreditation, technologist certification

**Key Websites**

- American Society of Neuroimaging: [www.asnweb.org](http://www.asnweb.org)
- Intersocietal Commission of the Accreditation of Vascular Laboratories: [www.intersocietal.org](http://www.intersocietal.org)
- American Institute of Ultrasound in Medicine: [www.aium.org](http://www.aium.org)
- American Registry of Diagnostic Medical Sonography: [www.ardms.org](http://www.ardms.org)