



## Commentary on Transcutaneous Oxygen Testing: Compliance and Practice Issues

### Coding and Billing Compliance

The CPT Manual <sup>1</sup> provides coding instructions for reporting tcpO<sub>2</sub> testing. Two such codes exist, 93922 and 93923. They are found on page 571 under a section entitled 'Extremity Arterial Studies'. It is worth noting that this section is incorporated principally to address non-invasive studies of large vessel perfusion and associated PVD. This is in contrast to the utilization of tcpO<sub>2</sub> testing in the hyperbaric/wound center setting, where problem wounds and other such lesions are assessed.

Consequently, coding decisions regarding transcutaneous oximetry are not intuitive. Both 93922 and 93923 codes descriptors reference bilateral studies, limited and complete respectively. It is uncommon for the problem wound referral to present with relevant pathology on both lower, extremities. Further, there appears within the descriptor language a requirement for a concurrent ABI.

Based upon our reading of these CPT descriptors and earlier conversations with an authoritative individual representing one Medicare Contractor, we have developed a position we think to be both clinically appropriate and defensible from a compliance perspective. Our position is that all single extremity tcpO<sub>2</sub> studies regardless of number of sites assessed and with or without an oxygen challenge should be coded as 93922. This is certainly the lower level/lesser reimbursed of the two options, a classification we have long felt undervalues the required technology acquisition costs, data collection time and resources and physician interpretation requirements. However, until such time that the CPT Manual better reflects the role and application of transcutaneous oximetry in problem wound management we are left with no compliant alternative. We do not routinely conduct an associated ABI and our above referenced Medicare source felt this reasonable omission. There may be other jurisdictions who insist on the addition of an ABI but we are presently unaware of any denial of payment for 'stand-alone' tcpO<sub>2</sub> claims and likewise unaware of any repayment demands. One should limit reporting code 93923 to those cases involving medically necessary bilateral studies which include three or more testing sites per extremity, or a single site of measurement bilaterally with an associated oxygen challenge.

Historically, Medicare Contractors placed a limit on the number of non-invasive extremity arterial studies that would be considered reimbursable within a given period. Common among many LCD's was a stipulation of a maximum of two such studies within a 60 day period. This may have represented a reasonable restriction when following large vessel potency and the diagnosis/evolution of related PVD. However, it was considered too restrictive to the transcutaneous oxygen algorithm employed in the hyperbaric medicine setting. We had previously appealed this standard and some Medicare Contractors



agreed to provide dispensation should the two test limit be exceeded. Today, most Medicare LCD's have eliminated reference to any such a restriction.

So, a common question is *'how many tcpO2 studies can we bill for?'* Again, we reference our Medicare Contractor resource. She advised that there is no limit, *per se*. What is important she noted, and consistent with essentially every other diagnostic and therapeutic intervention, is that one documents medical necessity. With sufficient justification reimbursement should be relatively forthcoming, although we would not rule out the necessity of an appeal to potential initial adverse decisions.

### **Practice Issues**

A physician order must to be generated for this diagnostic test, a step with have frequently found to been omitted. Ideally, the order should include specific instructions as to where electrode sensors are to be placed and whether or not a provocative oxygen challenge should be included.

The patient should undergo the usual and customary informed consent process, consistent with any other diagnostic test or therapeutic procedure. A consent form should then be executed.

Photographs of sensor electrode placement location(s) to ensure continuity of testing site(s) and a permanent marker dot in the center of the fixation ring (re-marking as it fades), have proven helpful identifiers.

Resulting data interpretation will help guide the hyperbaric medicine dosing profile. Such decision-making should be captured as a part of the formal tcpO2 testing interpretation report. Again, it is our experience that a written report of findings is frequently omitted.

Follow up tcpO2 testing should be scheduled, consistent with the condition being evaluated and treated. Such follow-up(s) should represent part of clinical progress documentation and decision-making regarding decisions to continue treatment of otherwise.

### **'Our Monitor is Broken'**

From time to time we come across facilities that have discontinued tcpO2 testing altogether. A common stated reason is that 'our monitor is broken'. Almost as frequently, no effort has been made to have the monitor returned for inspection and repair. If we turn the monitor on it appears to function and run through its calibration process. If we enquire further it often emerges that the problem is more an operator/interpreter shortcoming than with the equipment itself.

Staff members will frequently demonstrate an inadequate understanding of monitor set-up, calibration, patient preparation and site preparation.

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<sup>1</sup> **Current Procedural Terminology (CPT)**. *American Medical Association 2014; ISBN 978-1-60359-844-6.*