



The Hidden Costs in Workers' Compensation: Costly & Inaccurate Electromyography and Nerve Conduction Studies

Electromyography (EMG) and Nerve Conduction Studies (NCS) are essential in assessing muscle and/or nerve damage, but poorly administered or misinterpreted tests are resulting in higher costs for workers' compensation. One Call Medical, the national leader in EMG and NCS management, has found that as many as 40 percent of tests performed by out-of-network providers may be inaccurate. Carpal tunnel syndrome, the leading lost-time diagnosis and second-ranked injury in terms of claims costs, is one of the many conditions impacted by poorly administered EMG and NCS. One Call Medical discusses the challenges these tests present and the solutions it has implemented to improve quality of care, test accuracy, and claims costs.

To control workers' compensation spending, payers must be aware of hidden cost drivers that can dramatically impact their bottom line. Among today's significant cost drivers are quality issues with Electromyography (EMG) and Nerve Conduction Studies (NCS).

The Facts: As many as 40 percent of the EMG and NCS tests conducted "outside of the OCM network" may be inaccurate.

EMG and NCS are essential in determining the existence and extent of muscle and nerve damage in an injured employee. However, a poorly performed test or inaccurate test interpretation can derail a patient's entire treatment plan, leading to unnecessary or inappropriate medical services, delays in recovery, extended disability, and litigation—all of which can contribute to inflate workers' compensation costs.

One of the clearest examples of how inaccurate EMG and NCS can affect claims outcomes is with Carpal Tunnel Syndrome (CTS). According to the National Council on Compensation Insurance, Inc., CTS is the leading lost-time diagnosis and is ranked second in terms of total claims costs. EMG and NCS must be performed and interpreted accurately in order for these cases to be effectively managed for cost and quality control.

One Call Medical, the nation's premier leader in diagnostic testing for workers' compensation, strives to understand the scope and depth of the challenges presented by EMG and NCS. The key issues include:

- **Lack of adherence to national quality guidelines.** If providers do not adhere to the American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM) national quality guidelines, care

may be substandard, return to work can be delayed, and payers are exposed to hundreds of thousands of dollars in additional claims costs.

- **Inaccurate tests.** Up to 40 percent of the EMG and NCS conducted on injured employees by out-of-network providers may be inaccurate or misinterpreted, and as such they may not be medically useful in determining the next course of action on a claim.
- **Misguided treatment plans.** When EMG and NCS are performed incorrectly, injured workers may undergo unnecessary surgeries, or may not undergo surgery when they should.
- **Wide variation in price.** EMG and NCS can vary widely in price from provider to provider—often with no correlation of price to quality. A medically useful EMG may cost \$500, while a poorly managed test may cost \$4,000.
- **Lack of quality oversight in out-of-network exams.** In many workers' compensation programs, more than half of the EMG and NCS are performed out-of-network. As a result, tests are performed without the benefit of a managed approach—which would include the use of qualified physicians who are trained and board certified in the field of neurology or physiatry and are credentialed by a network that engages in quality oversight.

The Facts: A quality-driven EMG and NCS diagnostic management program leads to savings as high as 18 to 25 percent.

As a leader in diagnostic management, One Call Medical has identified key strategies that ensure that its network providers are delivering medically useful exams. These strategies include:

- Creation of a provider network that consists of only neurologists and physiatrists
- Development of EMG and NCS Report Standards utilizing the national quality guidelines as established by the AANEM.
- Utilization of a full-time, dedicated credentialing staff, who are advised by physicians board-certified in neurology and physiatry, and who perform a comprehensive two-part credentialing process:
 - First, the credentialing staff verifies credentials through the National Practitioner Database (NPDB) and the AMA Masterfile, which is a verification source approved by the National Committee for Quality Assurance (NCQA).

- Second, Clinical Services perform Clinical Reviews of sample EMG and NCS reports to ensure physicians adhere to Report Standards.
- Implementing an ongoing quality improvement program that ensures continued adherence to Report Standards, and to identify and address provider performance.
- Introducing an analytical and consultative approach that reduces the number of EMG and NCS that are currently performed out-of-network.

Maximizing Quality in EMG and NCS

Electromyography (EMG) and Nerve Conduction Studies (NCS) are utilized when muscle or nerve damage is suspected in workers' compensation injuries. With EMG, a needle electrode is inserted into the muscle to detect activity while the muscle is at rest and when it is contracted. With a NCS, a mild electrical stimulation is applied directly over the nerve(s) in increasing strength to elicit a response from motor and sensory nerves. The study helps to ascertain potential nerve damage.

EMG and NCS are commonly used to assess a number of injuries, such as carpal tunnel syndrome (CTS). Test results help to determine the right course of treatment, such as whether surgery or physical therapy may be required.

Poor quality EMG and NCS can lead to extended disability, unnecessary surgery, and delayed return-to-work outcomes. One Call Medical (OCM) has implemented the following solutions to ensure that both payers and patients receive the full benefit of quality EMG and NCS:

Solution #1: Utilizing Quality Providers

Due to the lack of adherence to national quality guidelines, EMG and NCS are often administered by unqualified physicians. To ensure properly administered tests, payers should utilize a quality provider network, such as One Call Medical.

One Call Medical ensures EMG and NCS are conducted by only skilled neurologists and physiatrists through its two-step credentialing process. First, One Call Medical's credentialing staff verifies all provider credentials. Second, its Clinical Services team reviews sample EMG and NCS reports to ensure physicians adhere to its Report Standards.

Solution #2: Adherence to National Quality Guidelines and Proprietary Report Standards to Ensure Accurate Test Results

There are multiple, complex variables affecting the accuracy of EMG and NCS outcomes, including factors such as a lack of proper training in performing these exams, proper temperature, timing of the examination, as well as many other parameters, about which One Call Medical is helping to educate the industry.

The solution to poorly administered EMG and NCS is to utilize a quality provider network that ensures diagnostic tests are properly conducted and accurately interpreted. One Call Medical with its in-depth EMG and NCS expertise leads the industry as the only diagnostic management company that has established a network of this kind. Four of the six members of its medical advisory board are past national presidents of the American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM) and five members are authors of AANEM's practice topic report on "Reporting the Results of Needle EMG and Nerve Conduction Studies: An Educational Report."

One Call Medical ensures that its neurologists and physiatrists continually adhere to propriety quality standards, which are based on the national quality guidelines of the AANEM. Once accepted into its network, providers are contractually obligated to continue to follow these guidelines and standards in order to remain in the network.

Solution #3: Ongoing Quality Improvement for Network Providers

Due to the accuracy challenges with regard to EMG and NCS, payers should ideally work with a diagnostic management partner who oversees quality. One Call Medical developed and implemented an ongoing Quality Improvement process to monitor EMG and NCS medical reports.

The Clinical Services' staff reviews all in-network provider reports to ensure continual adherence to quality guidelines and proprietary standards. Through ongoing monitoring, One Call Medical can detect deficiencies and take corrective action to improve outcomes.

Solution #4: Consultation and Education

For many payers, it is estimated that more than half of their EMG and NCS are currently performed out-of-network—without the benefit of provider discounts or quality oversight. These out-of-network tests result in higher medical and diagnostic costs, and potential scheduling delays, which can be detrimental to patient care.

Through an analytical and consultative approach, One Call Medical helps payers bring about an overall shift, so a greater percentage of tests are performed within its quality provider network.

In addition, One Call Medical has developed webinars and continuing education units (CEUs) that help the industry understand and address today's complex EMG and NCS challenges. These training opportunities are now available online through the new [OCM University](#). To register and view a calendar of events, go to www.onecallmedical.com, enter the [OCM Knowledge Center](#), and select Webinars/CEUs, or simply contact One Call Medical at the information at the bottom of this article.

Solution #5: Medical Bill Review to Capture Optimal Savings

Medical bills are often fraught with denied codes, non-compliance issues, over-billing, and unnecessary procedures. Payers should work with a diagnostic management partner that can provide the expertise and technical tools that allow for stringent bill review and repricing. In addition, payers should be able to benefit from network discounts that save them money above and beyond the accepted state fees and usual and customary rates (UCR).

The Facts: For many payers, more than half of their EMG and NCS are currently performed out-of-network.

Solution #6: Quality Review of Out-of-Network Tests

Since so many EMG and NCS are performed "out of network" without the benefit of quality oversight, One Call Medical also offers a "quality review" service for tests that are not scheduled by OCM.

Any payer may request that One Call Medical perform a clinical review of an EMG and/or NCS conducted by a provider outside its network. By requesting this review, the payer obtains an opinion of whether or not EMG and NCS were appropriately performed, and if those exams are medically useful. Payers interested in utilizing this quality review service can reach One Call Medical at the contact information below.

Benefits of a Quality-Driven EMG and NCS Program

Implementing a quality-driven managed approach to EMG and NCS promises immediate and substantial improvements in test accuracy and overall savings. Since injured employees are referred to uniquely credentialed neurologists and physiatrists, the resulting tests provide more accurate information on which to base a diagnosis and create an effective treatment plan—all of which leads to better care for injured workers and optimal recovery and return-to-work results.

One Call Medical has successfully partnered with many national payers to achieve measurable improvements. For example, savings delivered from One Call's EMG and NCS diagnostic management program have been as high as 18 to 25 percent. One client saved more than \$130,000 for 1,446 EMG referrals in just three months. Because of these outstanding results, many clients have designated One Call Medical as their exclusive diagnostic partner.

To learn more about One Call Medical and its EMG and NCS diagnostic management services, please contact these key resources:

General Clinical Inquiries:

Clinical Services' Message Center

Phone: 800-872-2875, extension 3431

Email: clinical@onecallmedical.com

Requests for Quality Reviews:

Email: quality@onecallmedical.com

Fax: 973-257-1363