# The Value of EMGs and Nerve Conduction Studies

Outpatient Procedure to Explore the Integrity of Nerves and Muscles



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# **How Pain is Diagnosed**



Low Back Pain 5th most common reason for all physician visits

Estimated cost: \$20 billion/year



Carpal tunnel
Major cause of nerve
pain & hand weakness

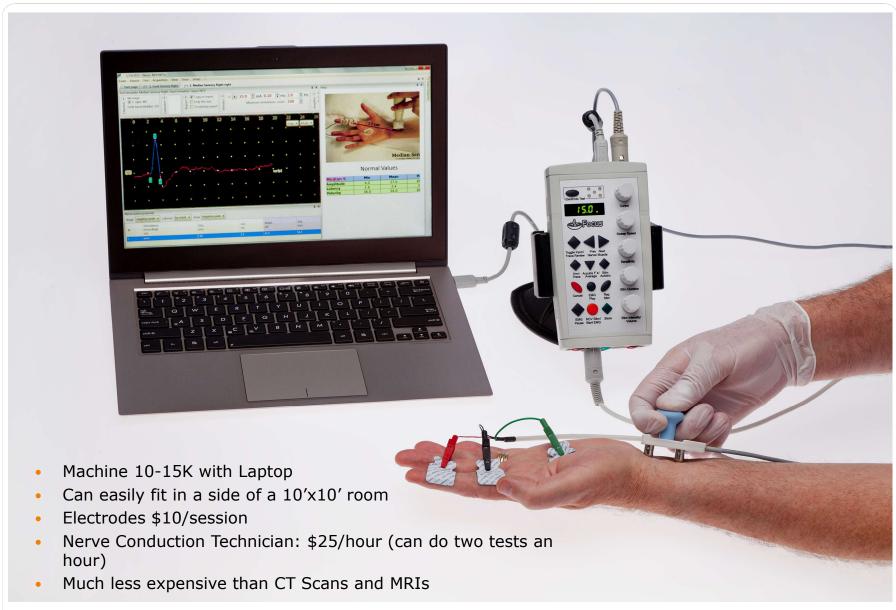
Estimated cost: \$2 billion/year



<u>Diabetes</u>
Approximately 60% of diabetics have neuropathy complications

Estimated cost: \$20 billion/year

#### **And How Much Does it Cost?**

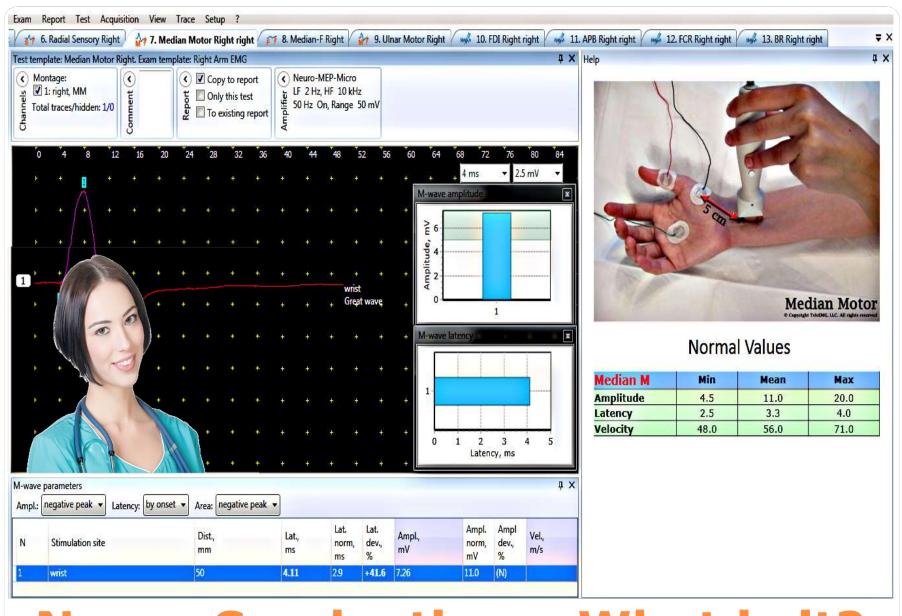


# **Sample EMG Machine with Laptop**

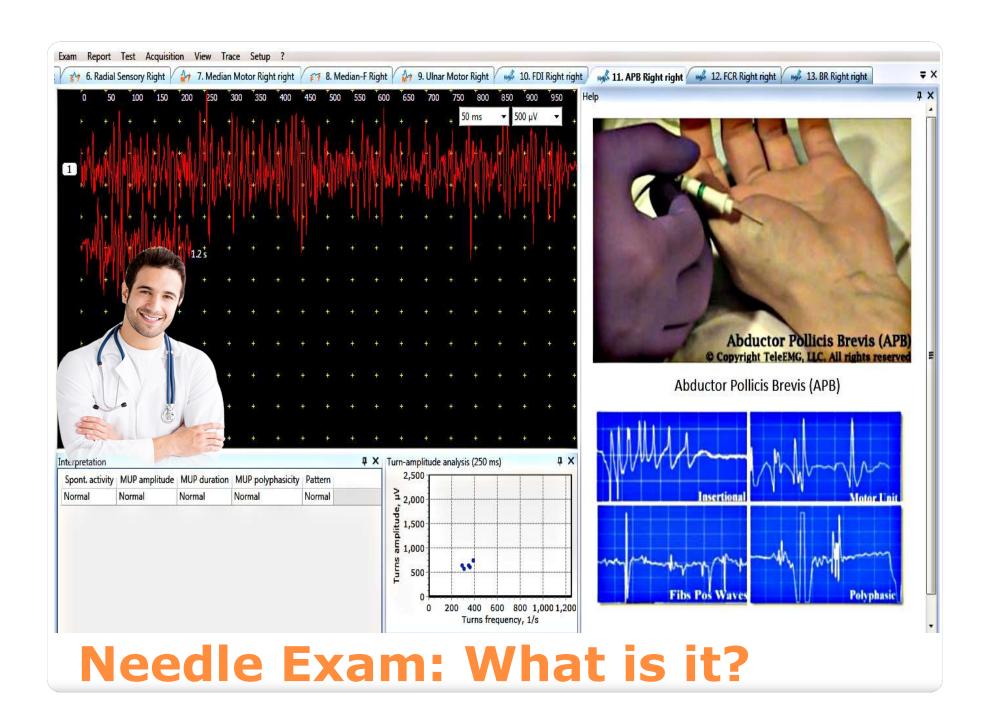
- An Outpatient Procedure that takes about 30' & consists of:
  - A Nerve Conduction Study: Explores Integrity of the Nerves
  - A Needle Exam: Explores Integrity of the Muscles
  - No Fasting or Medication necessary



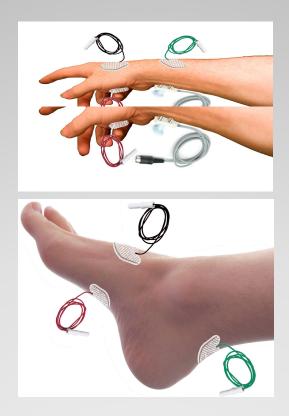
# **EMG Test: What is it?**



**Nerve Conductions: What is it?** 



 Galvanic Skin Response (GSR) useful in painful small fiber neuropathy and Fibromyalgia: Tech, about 5 minutes



# **EMG Test: What is it?**

CPT Codes covered by Medicare and Third Party Insurance

Prior to 2012			2013	2013 and after		
Proce dure	<b>CPT Code</b>	RVU	Procedure	<b>CPT Code</b>	RVU	
Motor	95900	1.86	1-2 studies	95907	2.74	
Motor w/F-w	95903	2.18	3-4 studies	95908	3.38	
Sensory	95904	1.64	5-6 studies	95909	4.06	
H-Reflex	95934	1.78	7-8 studies	95910	5.34	
			9-10 studies	95911	6.46	
			11-12 studies	95912	7.57	
			13 + studies	95913	8.77	

# **EMG Test: What is it?**

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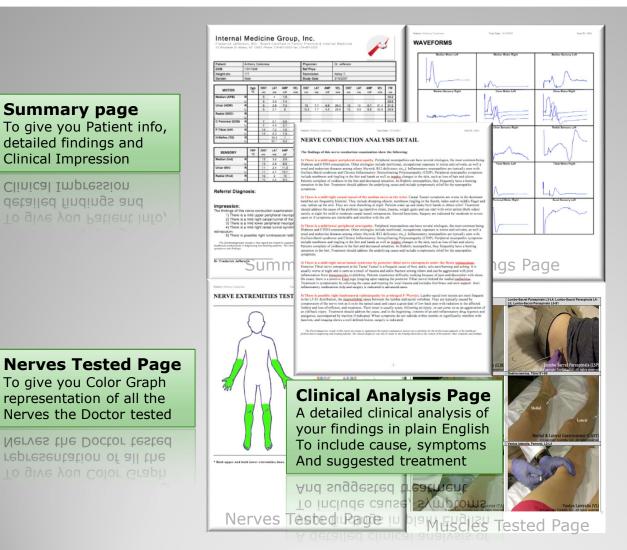
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- Age of Injury/Damage: Old versus New
- What is the Prognosis
- Whether Subsequent Treatment or Surgery was

- Run electrical impulses in Nerve and record how it is transmitted, if it is slowed, where it is slowed and how badly it is slowed
- Studies sensory and motor nerves for arm and leg injuries
- Studies H-Reflex and F-Wave for neck and back injuries and Brachial Plexus lesions (from motorcycle accidents)
- No Fasting or Medication necessary

## **Nerve Conductions**

- Electrodes inserted in arm and leg muscles
- Studies:
  - Contraction
  - Force
  - Damage Location Spinal Level (L4-5, C6-7 etc.)
  - Loss of Nerve Supply
  - Age of Lesion
  - Whether or Not there is Recovery
  - Success or Failure of Treatment

# **Needle Exam**



#### **Tracings Page**

To give you the real signals generated by your data for quality assurance

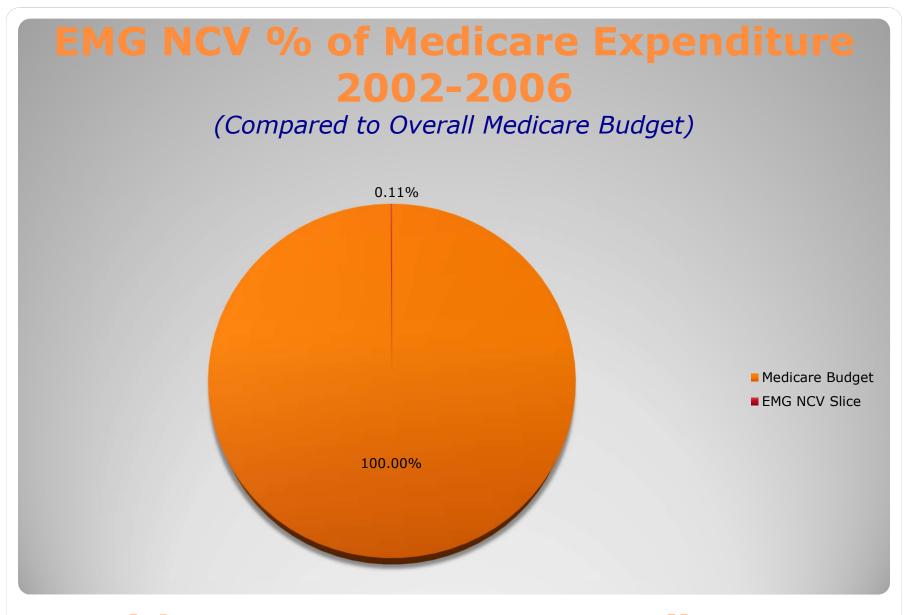
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#### **Muscles Tested Page**

To give you Color Graph representation of all the Muscles the Doctor tested

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The EMG Report: If you have to call the Doctor every time to explain it to you, you are wasting valuable time!



**Healthcare Impact: Very Small Dent** 

