

# Agency Medical Director Comments

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Electrical Nerve Stimulation



**Washington State  
Health Care Authority**



# Electrical Nerve Stimulation

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Approved for marketing\* by the FDA  
for:

- Tx of pain
- Tx of pain caused by osteoarthritis

\*Approval process -510(k)- does not  
require demonstration of efficacy.



# Transcutaneous Electrical Nerve Stimulation (TENS)

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- Originally introduced for Rx of neural pain on basis of Melzack/Wall theory of spinal pain modulation
- Use of technology has spread primarily to non-neural pain (eg, chronic low back pain)-questionable theoretical basis for these uses



# Agency Concerns

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- Does it work? Evidence leaves many questions though TENS has been used and studied for more than 30 years
- If it works to relieve chronic pain...
  - for how long?
  - is there improvement in function?
- Value: Costs are cumulative and related to ongoing rental/purchase of equipment and disposable accessories (eg, leads, skin patches, custom garments with built in electrodes, etc)



# Updated Cochrane Review

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- Update to review addressing OA of the knee (Rutjes et al., 2009) concludes:  
“we could not confirm that transcutaneous electrostimulation is effective for pain relief. The current systematic review is inconclusive, hampered by the inclusion of only small trials of questionable quality. Appropriately designed trials of adequate power are warranted.”



# Updated Cochrane Review

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Findings for OA knee include:

- 0% difference in pain improvement when using electrostimulation compared to fake electrostimulation
- 3% more patients treated with electrostimulation had improved physical function compared to fake electrostimulation



# Current Agency Policies

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- DSHS/UMP: No coverage policy. Use Hayes
- L&I Coverage Policy:
  - TENS and inferential units/supplies are covered for symptomatic relief and management of:
    - Chronic intractable pain, and
    - As adjunctive treatment for post-surgical and post-trauma acute pain
  - L&I coverage through one contracted DME provider

# State Agency Utilization Data

## Number of Devices Rented/Purchased Per Year

UMP, Medicaid & L&I

HCPCS CODES	2005	2006	2007	2008	Total
E0720 (TENS, 2 lead)	4	15	47	29	95
E0730 (TENS, 4 lead)	5,336	6,676	7,485	8,982	28,479
<b>Total</b>	<b>5,340</b>	<b>6,691</b>	<b>7,532</b>	<b>9,011</b>	<b>28,574</b>

\* Includes multiple instances, such as rental units

\*\* Code E0720 is not covered by L&I

## Distinct Patient Counts by Year

UMP, Medicaid & L&I\*

HCPCS CODES	2005	2006	2007	2008
E0720 (TENS, 2 lead)	3	7	26	18
E0730 (TENS, 4 lead)	1,792	2,163	2,661	2,998
<b>Total</b>	<b>1,795</b>	<b>2,170</b>	<b>2,687</b>	<b>3,016</b>



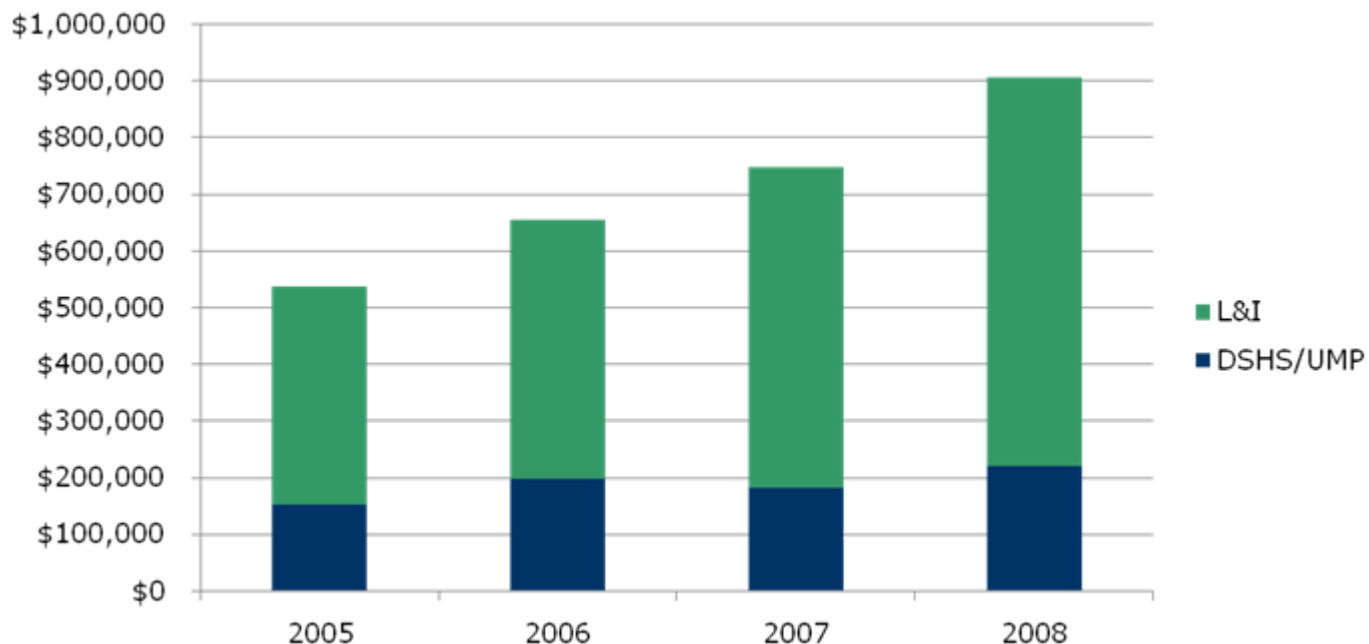


# Total\* Payments for Electrical Nerve Stimulators

## Device Payments by Year

UMP, Medicaid & L&I

	2005	2006	2007	2008	Total
Total	\$537,852	\$655,163	\$748,314	\$907,229	\$2,848,558





# Utilization Summary

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- Per patient costs relatively stable.
- Recent trend upward in total expenditures.
- Some claim experience shows extended rental periods (many months).
- Increase appears due to more injured workers receiving TENS treatment.



# Recommendations

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- Non-coverage for most conditions
- If committee finds evidence suggestive of benefit, allow only with monitoring of pain and function
  - Limit to 3 month time period with extension only based on demonstrated improvement during initial treatment period