



VitalStim Therapy in Outpatient Rehab

VitalStim Therapy is the use of neuromuscular electrical stimulation (NMES) during dysphagia therapy. Patients exercise their swallowing muscles while simultaneously receiving transcutaneous electrical stimulation applied through surface electrodes attached to the skin over the anterior neck. This use of NMES is FDA cleared and proven to be safe and effective, especially in stroke and deconditioned patients. Therapists receive special certification training to ensure competency.



Dysphagia is prevalent and burdensome

- 20% of adult primary care patients seeking unrelated medical care have symptoms dysphagia of which 46% had not reported problem to their physician¹
- Up to 65% of stroke patients have dysphagia²⁻⁵
- Fluid intake is insufficient in dysphagic patients following stroke⁶
- Dementia and dehydration are significant risk factors for pressure ulcer incidence⁷
- Direct charges associated with tube feeding over 1 year are estimated at approximately \$30,000⁸
- Quality of life and ability to participate in therapy are severely affected as result of dehydration and malnutrition⁹

Treatment of dysphagia is directly related to improved function

- Swallowing treatment improves swallowing function, and improved swallowing function is associated with improvements in nutritional parameters¹⁰
- Thickened liquids do not alter the rate of water absorption in the gut¹¹
- Better nutrition leads to better exercise performance and prevents energy depletion as a result of rehabilitation of the compromised patient¹²

Cost benefit of using VitalStim Therapy

- VitalStim Therapy is effective to treat dysphagia^{13, 14}
- Improved hydration and nutrition is directly correlated with improved patient outcomes (decreased associated costs and complications)
- Improved patient participation in therapy leads to better outcomes and faster discharge¹⁴
- Decreased number of patients on modified diets
- Improved staff and patient satisfaction¹⁵

Benefits of implementing VitalStim Therapy Program

- ↑ patient outcomes
- ↑ patient admissions
- ↑ marketability
- ↑ patient's participation in therapy
- ↑ performance on accreditation





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Cost impact study

Figure 1 below shows a typical scenario in an Outpatient Rehab Department. In this instance, the therapist typically sees patients every 60 minutes for individual dysphagia therapy. The profit/loss calculations are based on assumed expenditures of \$50 (time, supplies, etc.) This Outpatient department is realizing healthy net revenue per hour for the speech therapy services.

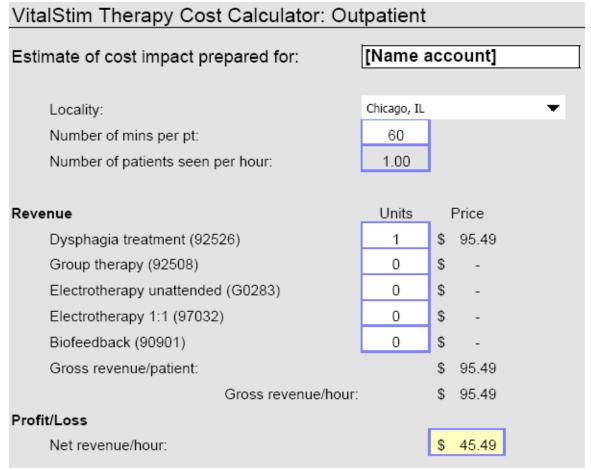


Figure 1: Revenue estimation in OP





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