What is TMS? Transcranial Magnetic Stimulation (TMS) is a series of repetitive, brief and highly focused magnetic pulses, used to stimulate brain cells.

Who can receive TMS? TMS therapy is currently indicated for adults with Major Depressive Disorder, who have failed to achieve satisfactory improvement from prior antidepressant medication in the current episode. TMS is typically prescribed when 2 or more antidepressants have failed, or medication side effects have proven too disruptive to a patient’s lifestyle or system.

Approximately 58% of patients with treatment resistant depression respond positively to TMS therapy, >37% of patients achieve complete remission.

Side effects? TMS is a safe and well-tolerated treatment with few known side effects. Clinical studies show that the most common side effects are mild to moderate scalp discomfort and mild headaches, both of which are short-term.

How does it work? In depressed patients, the electrical activity in certain areas of the brain have been shown to be reduced. TMS uses a focused electromagnetic coil, to rapidly pulse a magnetic field to the targeted area of the brain. The magnetic pulses induce an electrical current in the brain, stimulating the nerve cells, increasing the brain activity to normal levels.

Contraindications: Patients with any type of non-removable metal in their heads (except for braces or dental fillings). This includes:
• Aneurysm clips or coils
• Stents in the neck or brain
• Deep brain stimulators
• Electrodes to monitor brain activity

Discussion: TMS therapy should be considered for adults with depression, who have failed to achieve satisfactory improvement from prior antidepressant medications. The AOMC Behavior Health Clinic is currently accepting referrals.

References: