

Purpose: Repetitive Transcranial Magnetic Stimulation (rTMS) is a therapeutic medical procedure that was approved by Health Canada in 2002 for the treatment of psychiatric disorders, such as major depression. rTMS is a non-invasive treatment which uses a specifically designed magnetic coil to apply stimulation to target areas in the brain. The treatment utilises powerful and focused magnetic field pulses to stimulate the neurons in the brain.

The goals for rTMS are to:

- Reduce symptoms of depression
- Improve mood and ability to manage daily activities
- Maintain treatment in the community and avoid inpatient admission

Standard treatment duration: Patients need to attend 30 sessions over a course of six weeks (daily sessions from Monday to Friday, 7:00 am – 4:00 pm). Patients cannot miss more than three consecutive sessions or six sessions over the course of treatment. Appointments will be no longer than 1 hour.

Mandate of rTMS Clinic:

Patients admitted to the clinic fit the following criteria:

- Adult (18 years and over) with a major depressive disorder with a history of poor response or intolerance to medications
- Failed to respond to at least two trials of antidepressant medications or those who have an intolerance to at least two trials of medications
- Able to attend daily treatment sessions over a six week period
- Outpatient follow-up is required; rTMS clinic cannot take over care of patients

Factors which may **exclude** persons from receiving rTMS:

- Personal history of epileptic seizures or syncope
- Neurological conditions such as stroke, Huntington's disease, etc.
- Current suicidality
- Substance abuse disorder within the last three months
- Personality Disorder causing greater impairment than depressive episodes
- Psychosis, schizophrenia, schizoaffective disorder or depression with psychotic features
- Presence of ferromagnetic material anywhere in the head, excluding the mouth
- Significant reaction to rTMS or poor response to it previously
- Unstable medical or neurological conditions (i.e. history of spinal surgery, frequent or severe headaches or intracranial pressure)
- Pregnancy or intent to become pregnant in a short time
- Failure to respond to ECT in the current episode

Factors which may delay or reduce the effectiveness of treatment:

- Persons currently taking anti-seizure medication may be required to reduce or discontinue their dose
- Persons taking benzodiazepines may need to discontinue the medication for at least 4 weeks prior to the initiation of rTMS treatment
- Persons taking sleep medications (Zopiclone, Zolpidem)
- Persons using cannabis, cocaine or crystal methamphetamine

Triage:

1. rTMS is currently provided on an outpatient basis at two sites: Rockyview General Hospital (RGH) and Foothills Medical Centre (FMC).
2. Referrals will come from physicians. Please complete the attached referral form and send through fax to Access Mental Health (403) 943-9044. **rTMS referrals will not be accepted without this form.** rTMS referrals made by phone to Access Mental Health cannot be processed, they **must** be sent by fax.
3. The referral form is to be completed by the physician and will be triaged at the RGH rTMS Clinic. Administrative staff, located at RGH, will process all referrals.
4. All referrals will be reviewed by RGH nursing staff for appropriateness before an initial appointment is set up at RGH or FMC. Referrals will be distributed based on demand and client preference. Administration (at each site) will call the patient to arrange the initial appointment.
5. Should rTMS services not be appropriate for the patient, they will be referred back to the physician. The referring physician, or the patient, may contact Access Mental Health (403 944 1500) to explore other treatment options.