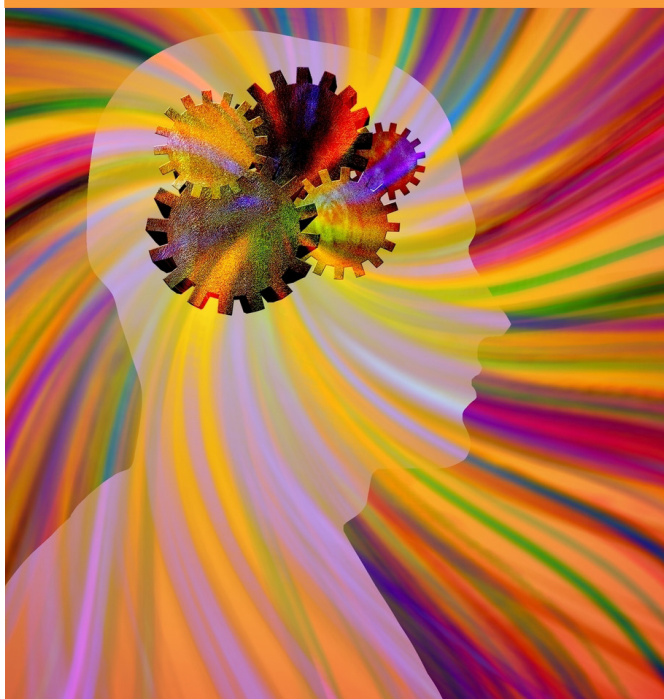


# Transcranial Magnetic Stimulation



## What is Transcranial Magnetic Stimulation (TMS)?

TMS is a mild form of brain stimulation. Magnetic fields, generated by a simple coil placed on the head, are used to stimulate a small area of the brain. The stimulation takes 20-30 minutes and is typically given over consecutive weekdays on an outpatient basis. While receiving stimulation, the patient is fully awake. TMS is usually well tolerated with minimal side effects. There is no anaesthetic and memory is not affected.

## When is Transcranial Magnetic Stimulation used?

TMS is used to treat depression and can be offered when patients have not responded to antidepressant medication, prefer to try an alternative to medication, or cannot tolerate antidepressant medications due to side effects [2]. It is important that a thorough psychiatric evaluation is undertaken for each patient to determine if TMS is a suitable treatment.

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## Using Transcranial Magnetic Stimulation to treat depression

A large body of research conducted worldwide and at our centre indicates that TMS has antidepressant effects when applied over the frontal areas of the brain. This includes more than 30 studies in adults with depression. It is understood that TMS works by modifying and correcting activity levels in the depressed brain either by increasing brain activity in areas that are underactive when people are depressed or reducing activity in areas that are overactive. TMS is now an approved treatment for depression in countries including Australia, the United States, Canada, Israel and the United Kingdom.



The Sydney Neurostimulation Centre (SyNC) at the Black Dog Institute, which offers TMS treatment is led by internationally respected psychiatrist and researcher Professor Colleen Loo with expertise derived from 20 years of experience in the treatment of mood disorders using brain stimulation techniques such as TMS. This work has been done in conjunction with the University of New South Wales.

## How long does Transcranial Magnetic Stimulation take to work?

A course of at least 20 sessions over consecutive weekdays is recommended for therapeutic results although patients may notice changes occurring earlier.

## What is the cost involved?

Treatment is provided on a fee for service basis. Each session will cost \$150. The accessibility to the treatment is limited within Australia due to the lack of a Medicare rebate for the treatment.

## Do I need a referral for the Sydney Neurostimulation Centre?

Yes, a referral from a psychiatrist or GP is required including completion of a TMS Referral Form, which can be obtained via the contact details below.

## Where can I find out more information?

Phone: (02) 9382 2987

Email: [TMSandDCS@unsw.edu.au](mailto:TMSandDCS@unsw.edu.au)

## Bibliography

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