

FOUNDATIONAL KNOWLEDGE FOR THE TMS TREATER:

CLINICAL TRANSCRANIAL MAGNETIC STIMULATION SOCIETY

Agenda

Introduction to TMS

Basic Neuroanatomy

Global Approvals

Research Advancements

TMS Treatment Parameters (and Protocols)

TMS Devices

TMS Safety and Tolerability

TMS Treater Scope of Practice

TMS Treater Ethical Guidelines

Audience: TMS Treater

A "TMS Treater" is a trained professional who administers Transcranial Magnetic Stimulation (TMS) therapy under the supervision of a licensed TMS prescriber. TMS treaters may include medical doctors, nurses, medical assistants, nurse practitioners, physician assistants, and therapists. The TMS treater may be referred to as different titles in different countries, such as TMS Technician (United States) or TMS Operator (Europe and Australia). While they may have a range of educational and practical experience, all have received specific training in the administration of TMS.

International Regulatory Agencies for TMS Approval

In **Canada**, TMS is Health-Canada-approved for TRD and OCD. Some specific devices are also approved for smoking cessation

In the **United States**, the Food & Drug Administration (FDA) has approved TMS for: depression, OCD, anxious depression, smoking cessation, PTSD

In South America, various regulatory agencies approved TMS for MDD, TRD. Approvals for other conditions vary by country.

In South Africa, TMS is approved for MDD and TRD by the South African Health Products Regulatory Authority (SAHPRA)



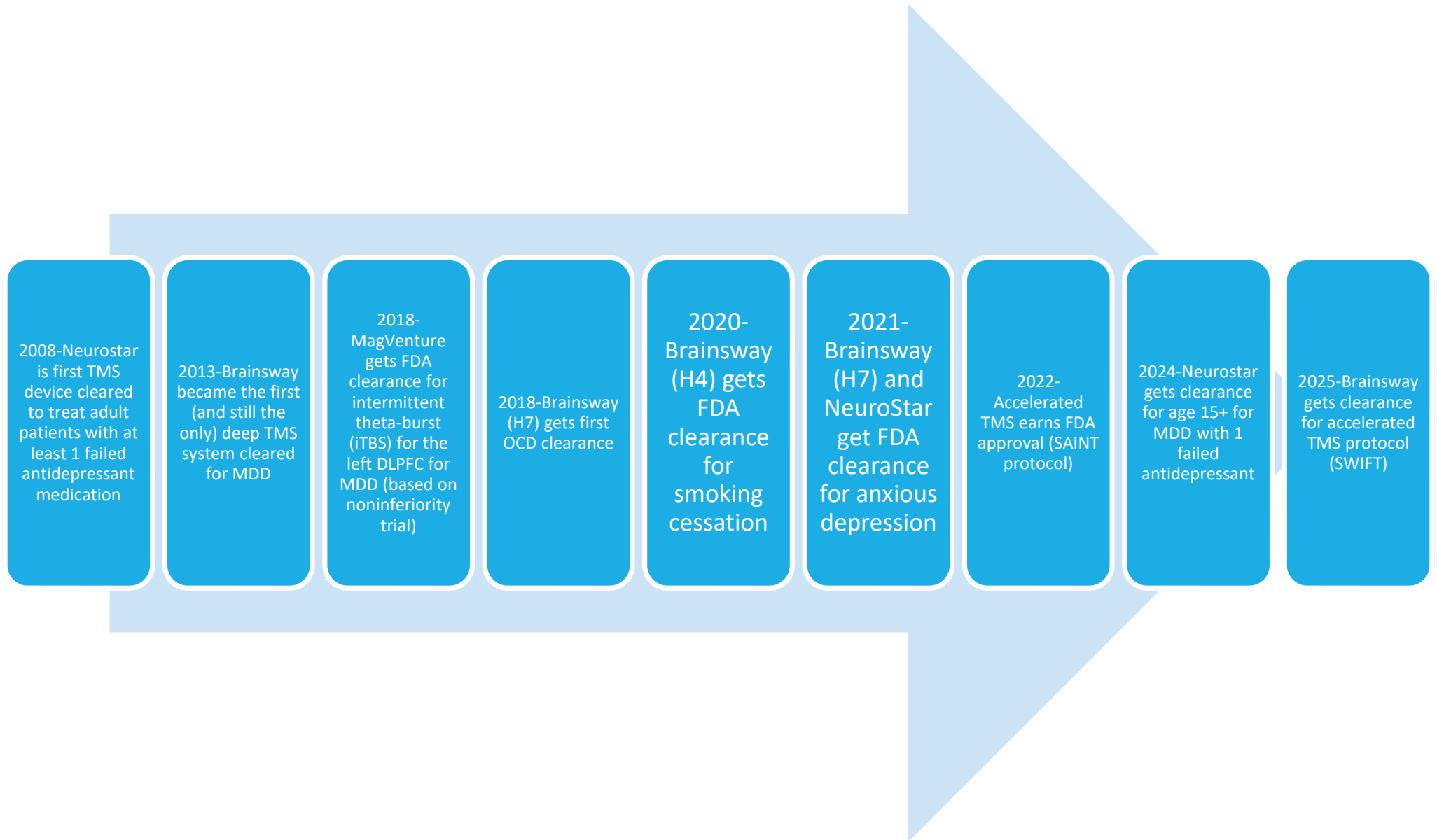
In **Europe**, TMS has CE certification for: MDD, OCD, Alzheimer's disease, PTSD, chronic pain, Parkinson's disease, multiple sclerosis, and post-stroke rehabilitation.

In Saudi Arabia, TMS is approved for TRD by the Saudi Food and Drug Authority (SFDA)

Asia: In China, TMS is approved by the National Medicine Products Administration (NMPA) for MDD. In Singapore, TMS is approved for MDD and OCD by the Health Sciences Authority.

In Australia, TMS is approved by the Therapeutic Goods Agency (TGA) and the Royal Academy College of Physicians (RANZP) for TRD

United States: TMS FDA-Clearance Timeline



SCOPE OF PRACTICE

Role and Responsibilities of the TMS Treater



TMS Treater – Scope of Practice

- Core responsibilities include both clinical and administrative tasks
 - **Clinical:** *delivering treatment, assessing tolerability, response, and risk, collaborating with internal and external clinicians*
 - **Administrative:** *clinical documentation, device maintenance, supply ordering, office maintenance*
- Scope of practice may differ depending on the treater's background, role, environment, regulatory factors etc.
- As such, this slide deck assumes a therapeutically oriented role in a general clinical environment

TMS Treater – Recommended Core Competencies

■ Core Knowledge

- *Basic mechanisms of TMS*
- *Fundamentals in TMS device design*
- *Basic neuroanatomy and neurophysiology*
- *TMS safety and risk*
- *Clinical documentation*

■ Safety and Ethics

- *Common side effects and adverse effects of TMS*
- *Diagnosis and management of seizure and syncope*
- *Hearing protection*

TMS Treater – Recommended Core Competencies

- Technical Applications and Hands-On Training
 - *Device operation and troubleshooting*
 - *Scalp measurements*
 - *Basic neurophysiology methods and techniques*
 - *Targeting TMS*
 - *Basic applications of TMS*
 - *TMS protocols and clinical indications with emphasis on those cleared by relevant regulatory bodies*

TMS Treater – Scope of Practice

- The treater is the main daily contact point for patients
- Should have strong interpersonal and patient facing skills
- Needs to understand the operational aspects of all daily TMS tasks
 - *Main daily contact for patients and to collaborate care with providers*
 - *Cap and coil placement*
 - *Neuronavigation registration (if used in clinic)*
 - *Selecting parameters per the treatment "prescription"*
 - *Running the treatment*
 - *Troubleshooting*
 - *Maintaining safety and monitoring for adverse effects*
 - *Cleaning up*