Service definition document

1. Service overview and benefits

Service overview

Theta Sleep is a CQC-regulated, tech-enabled sleep medicine service that supports NHS organisations to deliver diagnosis and treatment for sleep disorders out of hospitals and in patients' homes. The service combines a cloud-based secure digital platform with tightly governed clinical pathways to enable patients to be assessed, diagnosed and treated entirely in their own homes.

The service is designed for use by NHS providers and integrated care systems to support full end-to-end sleep pathways or targeted elements such as diagnostics, remote consultations or treatment initiation and monitoring. Theta Sleep can be deployed as a standalone fully remote pathway or integrated alongside existing local services to increase capacity and reduce waiting times while maintaining clinical safety and oversight.

Care is delivered through a digital-first model with inclusive access options, including telephone-based pathways, to ensure patients with lower digital literacy are able to engage with the service. The platform supports patients, clinicians, and service administrators through structured workflows aligned to NHS England, NICE and British Sleep Society guidance.

Service benefits

The Theta Sleep service provides the following benefits to purchasers and service users:

- Faster diagnosis and treatment for patients with suspected sleep disorders to deliver within DM01 and RTT targets.
- Reduced cost of care with pathways delivered at a significant reduction to tariffs.
- Improved access to care with diagnostics, consultations and treatment at home.
- Improved patient experience through digitisation, education and remote consultations.
- Increased service capacity through scalable, digital-first pathway delivery.
- Reduced clinical workload (and released staff capacity) with more efficient pathways.
- Reduced reliance on hospital estate for sleep medicine pathways.
- Reduced carbon impact through fewer hospital attendances.
- No initial outlay, overheads, or physical infrastructure required to deliver care.

2. Service scope and care pathways

Patient functionality

Patients access the service through a secure progressive web application (Theta Care). Theta Care acts as a companion app for the sleep medicine journey. Patients complete onboarding, receive education, provide a focused sleep history, and answer questions to help triage care and identify the optimum home sleep study for them. Support is available for patients with any issues.

Home sleep studies are delivered directly to patients, enabling assessment to take place outside hospital settings. Consultations are undertaken remotely via telephone or video depending on patient preference. Interpreters are available as required. Treatment is initiated in patients' own homes and patients receive ongoing support and follow-up to maximise treatment adherence through clinical follow-up and digital interventions. Inclusive access is supported through alternative pathways, including telephone-based support, for patients who are unable to engage digitally.

Clinician and service user functionality

Clinicians use the platform to review referrals, assess structured patient information, identify the optimum sleep study for patients, interpret sleep study results, document clinical notes and decisions, produce clinic letters, and communicate with patients. Service administrators can oversee pathway activity, manage operational workflows and access reporting to support service management and governance.

The service is configurable to align with local demands, operating models and governance arrangements, while remaining a standardised cloud-based service rather than bespoke software development.

Care pathways available

The Theta Sleep service is available as a modular or end-to-end solution. The software can be used to support alignment with national guidelines including NHS GIRFT, NICE NG202 and HTG735, and the British Sleep Society's Optimal Sleep Pathway. Three principal care pathways are available as part of the Theta Sleep service.

Pre-consultation pathway

1. Digital onboarding for patients onto Theta Care – a secure patient app (with a telephone supported pathway available for those with lower digital literacy).
2. On-demand sleep medicine education for patients via Theta Care.
3. Collection of a focused sleep history.
4. Digital triage and screening for other sleep disorders.
5. Clinical decision support tools to identify the optimum diagnostic for the patient based on NG202/HTG735 guidance.
6. In-home diagnostic sleep study delivered to patient's home.
7. MDT input from Theta Sleep clinicians and equipment partners (to manage high risk patients, or repeat diagnostics where required).
8. Scoring and reporting of the sleep study by appropriately trained clinicians.
9. Patients classified according to local specification for next steps.
10. Letter to referring service and patient outlining: classification, focused sleep history, outputs of sleep disorder screening, scored and reported sleep study, personalised advice and guidance based on patient inputs.
11. Support available on demand for patients via the Theta Sleep patient care team.

Full diagnostic pathway

- As per pre consultation pathway 1–11 plus:
- Consultation with a Theta Sleep clinician to discuss sleep study results, possible sleep apnoea and other sleep disorders.
- Prescription of treatment (eg. CPAP) as appropriate to be fulfilled by local service or by Theta Sleep (as part of end-to-end service).
- Patients risk stratified according to local specification to guide treatment urgency and next steps.
- Sleep study report and clinic letter sent to patient, GP, and referring partner outlining comprehensive sleep history and treatment plan.

End-to-end pathway including treatment

- As per full diagnostic pathway plus:
- Initiation of CPAP as required. Remote, in-home setup including mask fitting, education, ongoing supply of consumables.
- Ongoing adherence support in collaboration with equipment partners: calls at 24-48 hrs, 1 week, 1 month, 3 month, 6 month, 12 months and ongoing ad-hoc follow-up as required.
- Continuous adherence monitoring including digital interventions delivered via Theta Care for patients with adherence issues.
- Standard 6 month follow-up with Theta Sleep clinician to check symptoms, adherence, any ongoing issues. Moved onto the PIFU pathway from this point if appropriate.

Referrals

Referral is via manual entry, email, or APIs. Training is provided to referring partners regarding referral routes. Once a patient is added to the Theta Care platform they will receive a welcome email and instructions on how to access the web app. Details on how to access the support team are provided.

Patients schedule their sleep study and clinic appointments via the Theta Sleep service. Patients will receive multiple points of contact (email, SMS, and telephone) from the patient care team in case of non-scheduling of sleep studies or clinical appointments. The patient care team will discharge patients from the Theta Sleep system where no sleep study or appointment has been booked, where patients repeatedly DNA (did not attend) scheduled appointments and/or there is no engagement within agreed time periods.

3. Service delivery model, service levels, and support

Theta Sleep is delivered as a full remote service with no local installation or on-site infrastructure required. Onboarding is led by Theta Sleep in collaboration with the purchaser and includes configuration, governance alignment and user setup. The service can support full pathways or selected modular components. The service is delivered in line with Theta Sleep's in-house guidelines, SOPs, and policies related to patient care.

The Theta Sleep platform availability is guaranteed at 99.9% (monthly, excluding planned maintenance). The service is monitored continuously. User support is provided via a central support function during standard business hours, with incident escalation in place. Planned maintenance is communicated in advance, and service performance is reviewed through agreed reporting with the purchaser and regular governance and multidisciplinary team (MDT) meetings. The Purchaser shall report any issues related to the service via agreed channels (email and/or telephone). Issues will be addressed promptly by the Theta Sleep patient care team.

4. Data management, security, and information governance

Theta Sleep is delivered as a cloud-hosted service using secure UK-based cloud infrastructure. All patient data is stored in the UK and processed in accordance with NHS data protection requirements, with data encrypted in transit and at rest. Regular backups are performed, and business continuity and disaster recovery arrangements are in place to support service resilience and recovery.

Information security is governed through documented policies covering access control, data protection, incident management and business continuity. Access to data is role-

based and logged to support audit and accountability. Security governance is overseen by senior leadership and reviewed regularly.

The service aligns with recognised NHS assurance frameworks, including the NHS Digital Technology Assessment Criteria (DTAC), Data Security and Protection Toolkit (DSPT), DCB 0129/0160 (Clinical Risk Management), and UK Cyber Essentials. The Theta Sleep email system meets the NHS secure email standard (DCB1596) for the secure sharing of sensitive and confidential information.

5. Exit arrangements and continuity of care

At contract end, Theta Sleep follows a planned and clinically safe exit process agreed with the purchaser. No new patients are onboarded from the point of contract termination. Patients already in the diagnostic pathway are supported to complete diagnosis, with clinical letters and reports provided to the patient, their GP and the referring organisation before onward referral to local NHS services.

Patients already receiving treatment are transitioned back to local NHS services via their GP, supported by a complete record of diagnosis and treatment history. Where appropriate, patients within an initial treatment period may complete planned follow-up before handover. Data access, transfer, retention and deletion are managed in line with contractual terms, NHS data retention requirements and data protection legislation.