INTENT Collaborative
Integrated North Thames ENT Collaborative

STUDY 001

CT Image Guidance for Functional Endoscopic Sinus Surgery

A Regional Survey of Availability, Utilisation, and Trainee Experience across North Thames Hospital Trusts

Study type	Regional cross-sectional survey — service evaluation
Lead collaborative	INTENT (Integrated North Thames ENT Collaborative)
Target population	ENT doctors (CT1–ST8, trust grade, SAS), North London hospital trusts
Survey duration	6 weeks (open)
Target responses	60–100 (full eligible cohort)
Ethics requirement	Service evaluation — no HRA approval required
Version	v1.0 — March 2026

Public protocol summary. This document describes the study design, objectives, eligibility criteria, governance arrangements, and analysis plan for INTENT Study 001. The full survey instrument and operational materials are available to site leads and collaborators on request. To register as a site lead or take part in the survey, visit **intentcollab.vercel.app**.

Part 1 — Study Protocol

1.1 Background and Rationale

Functional Endoscopic Sinus Surgery (FESS) carries well-recognised risks of major complications including orbital and intracranial injury. CT image guidance systems (IGS) — also known as surgical navigation — allow intraoperative correlation between endoscopic views and pre-operative CT imaging, potentially reducing the risk of anatomical disorientation, particularly in complex or revision cases.

Despite increasing availability of IGS technology in UK hospitals, there is no national guidance specifying which FESS cases warrant its use, and no published data on the current state of IGS provision across NHS training centres. Practice is highly variable and likely driven by individual consultant preference, equipment availability, and local resource constraints rather than evidence-based criteria.

From a trainee perspective, IGS also represents an important technical skill: the ability to register and interpret a navigation system is increasingly expected of graduating otolaryngologists, yet access to hands-on training is likely inconsistent across centres.

INTENT Study 001 aims to characterise this variation across North Thames, establishing a regional baseline that could inform future national benchmarking, training standards, and advocacy for a BAOHNS/ENT UK position statement on IGS use in FESS.

1.2 Objectives

Primary objective:

- To determine the availability and distribution of CT image guidance systems for FESS across North Thames ENT training units.

Secondary objectives:

- To characterise current utilisation patterns — specifically which case types routinely employ IGS.
- To assess trainee access to and experience with IGS, including hands-on training opportunities.
- To identify perceived barriers to IGS use.
- To capture trainee and consultant opinion on whether regional or national guidance on IGS use is needed.

1.3 Study Design

A cross-sectional survey of ENT doctors across North Thames (North London hospital trusts), designed as a service evaluation. Two parallel electronic questionnaires will be distributed: **Survey A** for trainees and non-consultant doctors (CT1–ST8, trust grade, SAS), and **Survey B** for consultant ENT surgeons. Each survey will remain open for six weeks. A single reminder will be circulated at the three-week midpoint via site leads.

1.4 Eligibility

Survey A — Trainees and non-consultant doctors:

Inclusion:

- ENT trainees at CT1–ST8 grade currently in a North Thames training post.
- Trust grade, SAS grade, and non-training-grade doctors currently working in an ENT department within the North Thames region.

Exclusion:

- Doctors on out-of-programme activity (OOPE/OOPR) not currently in an active clinical ENT post.
- Trainees based outside the North Thames region.
- Consultants and doctors above SAS grade.

Survey B — Consultant ENT surgeons:

- Consultant ENT surgeons currently practising at an INTENT member unit.
- Distributed separately by site leads to all eligible consultants.

Note on non-training grades. Trust grade and SAS respondents represent a heterogeneous group in terms of experience. Years of ENT clinical experience is collected for this group and used as a primary stratification variable, allowing meaningful comparison with trainees at equivalent experience levels.

1.5 Member Units

INTENT Study 001 covers the following twelve North London hospital trusts:

Hospital	NHS Trust
The Royal London Hospital	Barts Health NHS Trust
Whipps Cross University Hospital	Barts Health NHS Trust

Charing Cross Hospital	Imperial College Healthcare NHS Trust
St Mary's Hospital	Imperial College Healthcare NHS Trust
West Middlesex University Hospital	Chelsea and Westminster NHS Foundation Trust
Northwick Park Hospital	London North West University Healthcare NHS Trust
Queen's Hospital, Romford	Barking, Havering and Redbridge University Hospitals NHS Trust
The Royal Marsden Hospital	The Royal Marsden NHS Foundation Trust
University College London Hospital	University College London Hospitals NHS Foundation Trust
The Royal National Nose Throat and Ear Hospital	University College London Hospitals NHS Foundation Trust
Royal Free Hospital	Royal Free London NHS Foundation Trust
Homerton Hospital	Homerton Healthcare NHS Foundation Trust

1.6 Site Lead Framework

Each North Thames ENT unit will be represented by a site lead — a trainee or trust grade doctor based at that unit who takes responsibility for local survey distribution and response rate optimisation. Site leads will confirm their unit denominator before launch, distribute the survey links locally, send a midpoint reminder, and report response numbers at close.

Site leads will be acknowledged explicitly in any resulting publication as 'INTENT Site Lead' for their unit. Doctors wishing to volunteer as site lead for their unit can register at **intentcollaborative.co.uk**

1.7 Governance and Ethics

This study is designed as a service evaluation and does not require HRA research ethics approval. The study will be registered with the audit and service evaluation department at the lead NHS trust prior to survey launch. The surveys are fully anonymous — no patient data are collected, and respondent identities are not recorded within survey responses unless respondents voluntarily consent to be named as collaborators.

1.8 Sample Size

The estimated total eligible population across INTENT member units is 80–120 doctors (ENT trainees at CT1–ST8 grade plus trust grade and SAS doctors). The study aims to achieve a response rate of at least 50% of the eligible population at each site. No formal power calculation is required for a descriptive survey.

1.9 Analysis

Data will be analysed descriptively. Continuous variables will be summarised as median and interquartile range; categorical variables as frequency and percentage. Free-text responses will undergo simple thematic analysis.

Stratification. Analysis will be stratified across three pre-specified groups: core trainees (CT1–CT2); higher trainees (ST3–ST8); and non-training grades (trust grade / SAS), stratified by years of ENT experience. The primary analysis will focus on higher trainees as the group with the most direct and consistent FESS exposure.

Subgroup comparisons (DGH vs teaching hospital; junior vs senior trainees; units with vs without IGS; trainee vs consultant perspectives) will be performed using chi-squared or Fisher's exact tests as appropriate. Response rates will be reported by site using denominators provided by site leads.

1.10 Authorship and Collaboration Policy

INTENT operates an inclusive authorship model for its inaugural study:

- The steering group (founding members) will be listed as named authors in the standard author list.
- Site leads will be acknowledged explicitly as 'INTENT Site Lead' for their unit.
- All survey respondents who consent to be named will be listed as collaborators in a group authorship block (e.g. 'on behalf of the INTENT Collaborative').
- Trainees who contribute to data analysis, write-up, or manuscript review will be considered for inclusion in the named author list at the discretion of the steering group.

This policy is communicated at the point of survey distribution. Consent to be named is collected within the survey itself.

1.11 Timeline

Milestone	Target
Co-founders & consultant mentor confirmed	Weeks 1–2
Site leads recruited (all units)	Weeks 2–3
Service evaluation registered at trust	Weeks 2–4
Survey finalised and piloted	Weeks 3–4
Survey launched	Week 5
Midpoint reminder	Week 8
Survey closed; response rates reported	Week 11
Data cleaned and analysed	Weeks 12–14
Manuscript drafted	Weeks 15–18
Manuscript submitted	Week 20

Part 2 — Survey Instruments

Note. The full survey instruments are not reproduced in this public protocol summary to avoid inadvertently priming respondents prior to completion. The surveys are available to complete at **intentcollab.vercel.app/studies/intent-01**. Researchers wishing to review the full question sets for peer review or replication purposes may contact the INTENT steering group directly.

Two parallel surveys have been developed and validated for this study:

Survey	Population	Content	Time
Survey A	Trainees and non-consultant doctors (CT1–ST8, trust grade, SAS)	30 questions across 6 sections: about you; equipment availability (site leads); utilisation patterns (site leads); trainee IGS experience; barriers and attitudes; final questions and consent. Contains branching logic so site leads complete two additional sections on unit-level infrastructure.	~4–6 min (8–10 min for site leads)
Survey B	Consultant ENT surgeons	25 questions across 6 sections: about you; IGS use in practice; utilisation standards and indications; training and education; policy and standards; publication consent.	~6–8 min

Part 3 — How to Participate

Completing a survey

Eligible doctors can complete Survey A (trainees and non-consultants) or Survey B (consultants) via the INTENT website. Both surveys are anonymous. Completing either survey makes you eligible to be listed as a named INTENT Collaborator in any resulting publication.

Becoming a site lead

Site leads are the engine of this study. If you are an ENT trainee or trust/SAS grade doctor at one of the INTENT member units and are willing to coordinate survey distribution at your hospital, please register at **intentcollaborative.co.uk/join**. The commitment is approximately 1–2 hours across the 6-week survey period.

Contact

For enquiries about INTENT Study 001, to request access to the full survey instruments, or for any other questions, please contact the INTENT Collaborative via intentcollaborative.co.uk