Using our data to unlock pathways

How the Trust worked with Akeso to use Trust data to identify missed opportunities, plan to improve pathway use and inform the future

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South Eastern HSC Trust | August 2026

The problem: good pathways existed, but were not used consistently and we knew the service

The challenge was not simply whether a pathway was available—it was whether eligible patients were identified and referred in time.

Patients were being missed

Potentially suitable frail patients in inpatient and ED settings were not always considered for Hospital at Home.

Identification relied heavily on busy clinical teams recognising eligibility and initiating a referral among many pathways.

Referral was variable

Limited awareness of eligibility, different perceptions of clinical risk and several possible pathways meant HaH was not consistently considered.

The referral process also involved manual review, multiple steps and duplicated recording.

Capacity constrained use

Even when patients were assessed as suitable, some could not be accepted because service capacity was unavailable.

This made it difficult to distinguish unmet demand from referral behaviour and operational constraint.

Core question: how many people could benefit from the pathway—and what was preventing that benefit from being realised?

What we set out to do

Use data to move from assumptions about pathway use to a quantified picture of demand, missed opportunity and operational need.

1

Find

Identify patients who met clinically agreed indicators of suitability

2

Compare

Compare model outputs with actual referrals and clinical decisions

3

Quantify

Measure missed referrals, capacity-related declines and hidden demand

4

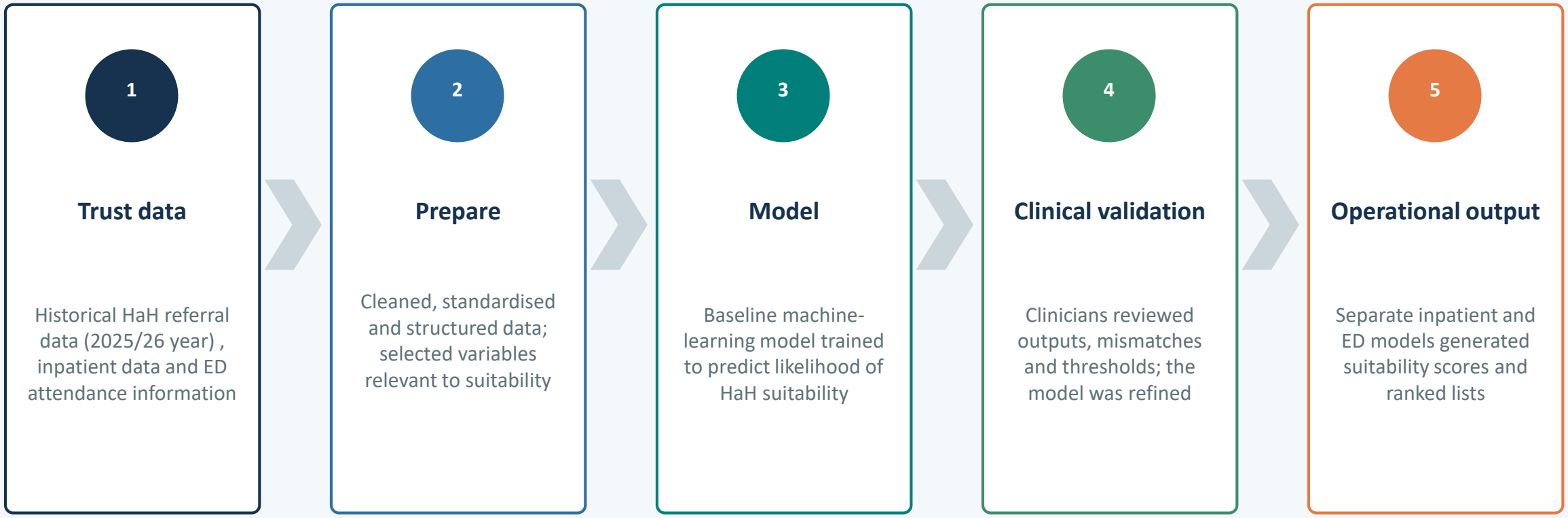
Use

Translate the findings into workflow, capacity and investment decisions

The tool was designed to support clinical decision-making—not replace clinical judgement.

How the data was obtained and analysed

Akeso combined Trust data with iterative clinical validation to build a pathway-specific model.



Model performance improved through clinician review

What the analysis showed

The data demonstrated both unused pathway opportunity and a need to address capacity.

11% - 3,189

of 2025 inpatients were identified as clinically appropriate for HaH but were not referred

3% - 3,933

of 2025 ED patients were identified as potentially suitable but were not referred

24.6%

of eligible referrals on an average day were not admitted because of capacity

83%

average model alignment with clinician referral decisions rising to over 90% with access to limited free text data

Referral opportunity

The HAH pathway was not being considered consistently across all relevant settings.

Operational constraint

Increasing identification alone would not deliver benefit if capacity remained unchanged.

Planning evidence

The analysis provided a clearer basis for estimating demand and right-sizing the service.

The modelling indicated potential impact of *53 beds* saved if all suitable patients were taken into HaH

The outcome: a clearer route from data to pathway use

Phase 1 moved the Trust from anecdotal concern to a clinically validated proof of concept and quantified opportunity.

What was delivered

A validated proof of concept using Trust data – can be applied to any pathway

Separate inpatient and ED models aligned to different clinical workflows

Ranked outputs to focus clinical review on higher-probability patients

What changed

Greater visibility of patients not referred

Clearer evidence of capacity-related missed opportunity

A practical method for moving from first-come referral towards suitability-led prioritisation

What this enables

Earlier and more consistent consideration of HaH

Evidence for workforce and capacity planning

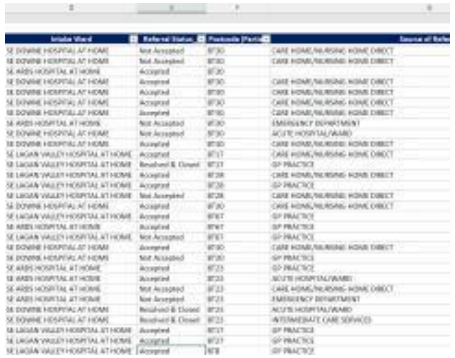
A platform to connect inpatient, ED, community and virtual pathways

The central benefit is not the algorithm alone—it is making existing pathways easier to identify, access and plan.

The model delivers a daily ranked prioritisation to enable proactive triage

With strong clinical alignment and pathway specific refinement established, the model can provide daily, structured view of patients most likely to benefit from HaH.

Live information output



Clinical Variables

- Age
- Frailty Score
- Recent admissions
- ED attendance
- Inpatient stays
- ICD-10
- OPCS
- Diagnosis Group
- Geographic eligibility

Suitability Score

- 0.85 -1: Strong candidate
- 0.20-0.85: clinical review
- <0.20: Unlikely appropriate

Operational Impact

- Immediate triage focus
- Clearer visibility of demand
- Prioritise high probability patients
- Eliminate low value review
- Improve speed, consistency and equity of decisions
- With right sizing, allows proactive identification

Fully automated
Machine learning assisted scoring, ranking and referral management

Prioritised workload
Highlights patients in suitability order

Clinician Control
Staff review records and make the decision

South Eastern Health and Social Care Trust

Next steps: move from proof of concept into operational use

The next phase will combine the tool, pathway redesign, education and capacity planning.

1. **Embed in workflow** — Use a clinician-facing interface and place ranked patient lists into daily inpatient, ED and HaH triage processes.
2. **Improve the data** — Strengthen EPIC data quality, explore clinical notes and social history, and improve capture of GP and community referrals.
3. **Build confidence** — Train referring teams on HaH capability, eligibility and risk so pathway use becomes earlier and more consistent.
4. **Right-size capacity** — Model full eligible demand across inpatient, ED and community routes and translate this into workforce and capacity requirements.
5. **Govern and evaluate** — Apply clinical safety, threshold oversight, outcome monitoring and benefits tracking through existing governance arrangements.

Success depends on improving pathway use and capacity together; identification alone will not release the full benefit.