



**Synopsis**

A VitalHub Company

**CASE STUDY**

**Digitalising and streamlining the  
pre-operative pathway at  
Worcestershire Acute Hospitals  
NHS Trust**

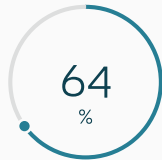


**Worcestershire  
Acute Hospitals**  
NHS Trust

## KEY NUMBERS



Pre-op assessments completed annually across the trust



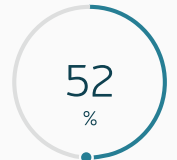
Reduction in face-to-face pre-op appointments



Hospitals completing pre-op assessments across the trust



Positive feedback from patients using Synopsis



Reduction in activity time for a pre-op assessment

## THE CHALLENGE

A cross-speciality workshop with staff (across nursing, surgical, anaesthetic, administrative and operational) to identify barriers to improving operating theatre performance across Worcestershire Acute Hospitals NHS Trust (the Trust), recorded that the pre-operative assessment (POA) process was inefficient, and a barrier to improving the surgical pathway and maximising operating theatre use.

### The Workshop Identified Two Main Barriers:

#### 1. Pre-operative Assessments Were Taking Too Long

60 minute face-to-face appointment slots were being booked for all patients, irrespective of their procedure or previous medical history. And on the occasions when telephone assessments were booked instead of a face-to-face assessment, the decision to do so was based on age and procedure, rather than the patient's health.

#### 2. Patients Were Being Assessed Too Close to Surgery

50% of patients were being assessed only two weeks prior to their operation, despite some being on waiting lists for 12 months. Many of these patients were found to be unfit for surgery during the POA. If assessed earlier, this time could have been used to intervene and help patients reach the appropriate condition for surgery.

## THE VISION

The Trust, which assesses 11,000 patients each year for surgery, wished to start a patient's POA pathway at home (where appropriate) using a digital POA questionnaire. Providing the ability for patients to complete their POA health questionnaire at home digitally would result in a significant reduction in the volume of face-to-face appointments across the Trust, which would release valuable staff time.

Once the questionnaires are completed at home by the patients, the pre-operative team would be able to begin the triage process immediately (with support from over 250 clinically validated algorithms to further streamline the assessment process), and identify patients who were fit-for-surgery and those at high risk. Patients would then be 'swimlaned' into appropriate pathways for their POA risk assessment to be completed by the pre-operative team.

The Trust also wished to standardise POA process across its 3 hospitals, with the aim of supporting cross-site multidisciplinary working and patient load balancing.

## THE OBJECTIVES

- Identify fit-for-surgery patients as early as possible
- Reduce pre-op activity time per assessment
- Release time for staff to identify patients at high-risk of being unfit for their operations
- Reduce the number of cancelled operations
- Facilitate a hybrid approach to POA data capture with a fully PAS integrated solution



## THE SOLUTION

**Synopsis iQ** underpins the Synopsis platform and facilitates the digital POA pathway across the Trust. If attending an initial hospital appointment, patients complete their health questionnaire on a tablet, alternatively, staff can fill in the form with the patient. Staff then complete the full risk assessment in Synopsis iQ.

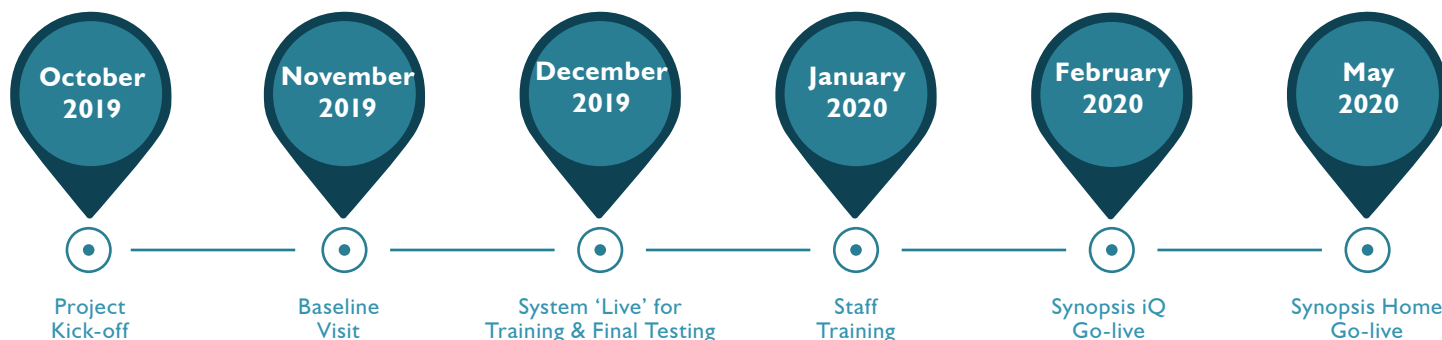
**Synopsis Home** enables the Trust begin a patient's POA pathway from home. The patient can complete their POA health questionnaire via a tablet, smartphone, or computer without attending a hospital. The data is then shared to Synopsis iQ for staff to complete the full risk assessment.

Critically, this hybrid approach to POA data capture is fully integrated with the Trust's PAS. Instant access to the POA data, whether captured during a hospital appointment or from a patient submitting their questionnaire remotely, enables the Trust's multidisciplinary teams to collaborate easily and triage every elective surgery patient within a single digital dashboard.

## THE TIMELINE

Before the launch of Synopsis iQ in February 2020, staff received on-site training throughout January to ensure a smooth transition to the digital process. Synopsis Home was then deployed in May 2020, once Synopsis iQ was fully integrated into the Trust's new ways-of-working model.

After the deployment of Synopsis iQ, the first national Covid lockdown came into effect. The Trust implemented a skeleton triage team of 5 (25% of the original team), to safely continue triaging cancer surgeries, with the goal of restarting elective surgeries when safe to do so.



## THE OUTCOME

### Fewer Face-to-Face Appointments

The implementation of Synopsis Home has seen a reduction in patients attending hospital for a 60 minute face-to-face pre-op appointment by 64%, as these patients complete their pre-op health questionnaire at home digitally instead.

Only patients requiring a face-to-face appointment, or those choosing to attend (just 36%), will attend one of the hospitals. Reducing the number of in-hospital appointments has also supported the Trust's infection prevention and control measures in the wake of Covid-19. Synopsis has reduced the number of patients in hospital buildings, enabling vulnerable pre-op patients to shield at home.

### Replacing the Paper Assessment Process

For staff, Synopsis has replaced the previously resource-heavy and time intensive paper-based assessment process with a digital solution. The digital process facilitates instant sharing of assessment data and has reduced total pre-op activity time by 52%.

Once a patient completes their health questionnaire, the data is shared instantly with the Trust's pre-op team (and is accessible Trust-wide), with no need to use, access, transport or store paper records.

### Low-Risk Patients Identified Sooner

The Synopsis decision engine uses over 250 clinically validated algorithms to generate clear outcomes during a full risk assessment, producing a collection of published clinical scores, including ASA, STOP-BANG and P-POSSUM among others. Synopsis iQ also generates a calculated cardiac risk and lung risk levels, and a mortality score as part of the assessment process.

These risk scores provide a standardised, summarised view of the data, helping staff to identify low-risk patients to fast-track into light-touch care pathways. The released clinical activity time can be reallocated to higher-risk patients requiring in-person consultations and care intervention.

### The Pre-op Assessment Process Starts Sooner

Following the implementation of Synopsis Home, the lag time between a patient being referred for the POA and the triage questionnaire being completed has been significantly reduced from an average of several weeks to just 3 days. By addressing this delay, a greater pool of fit-for-surgery patients has been established to fill last-minute theatre slots, encouraging greater theatre utilisation through a more adaptive process.

**Synopsis is another great example of how digital innovations within our organisation are having a profoundly positive impact on our patients, their families, and their overall experience of care in our hospitals.**

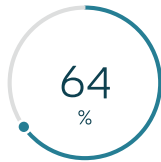
**To successfully implement this during the COVID pandemic is a credit to the team involved and their commitment and dedication to putting patients first.**

**Vikki Lewis**

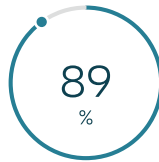
Chief Digital Officer

Worcestershire Acute Hospitals NHS Trust

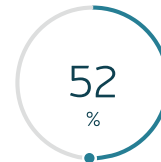
# THE RESULTS



Of patients complete their pre-operative assessment at home via Synopsis Home



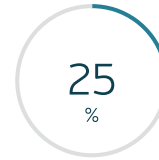
Positive feedback from patients after using Synopsis Home



Reduction in activity time for a pre-operative assessment



Interventional radiology and vascular patients have been assessed by the pre-op team for the first time, due to the POA process being standardised Trust-wide

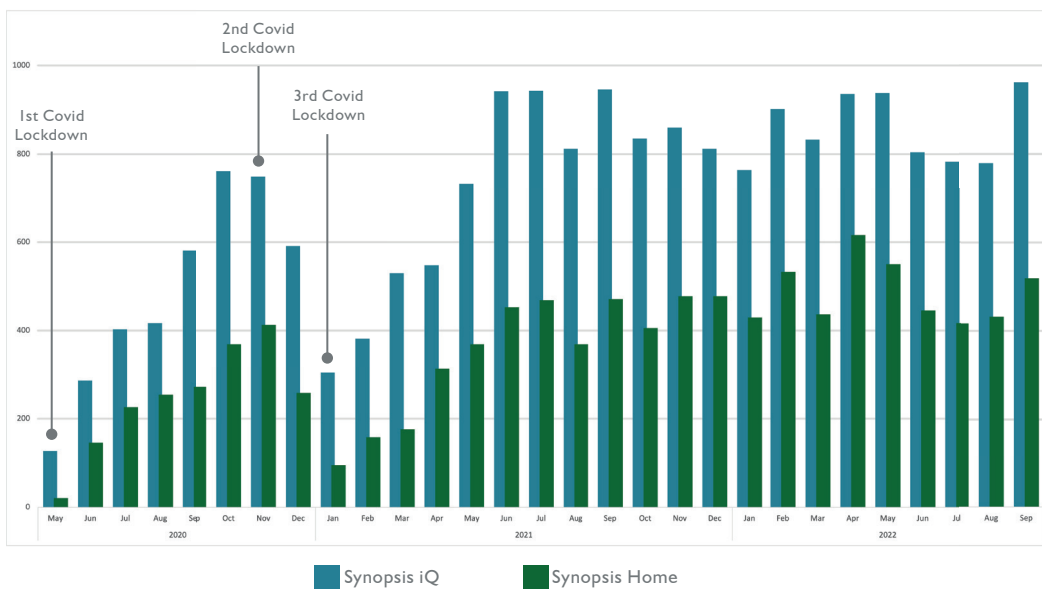


During the first Covid lockdown a team of 5 (25% of the original team) were able to safely triage patients, maintaining cancer surgeries



The time between a patient referral for pre-assessment and completing their questionnaire has reduced from several weeks to an average of 3 days

## Total Pre-operative Assessments Completed via Synopsis



Synopsis was deployed just before the first Covid-19 lockdown came into effect, which caused most elective surgeries to be postponed, and the POA staff to be redeployed.

A skeleton triage team of 5 were able to safely triage patients during the lockdowns, maintaining cancer surgeries and supporting the Trust to restart elective operations as soon as safe to do so.

Synopsis also enabled staff to work from home, further supporting infection prevention measures and the skeleton triage team in maintaining pre-op capacity during the lockdowns.

## Synopsis Home - Reduced Travel

Average savings over a 3 month period for patients using Synopsis Home



**1,025 Kg CO2** emissions saved due to reduced travel to hospital



**722 hours** saved inside hospital by patients completing their health questionnaire at home

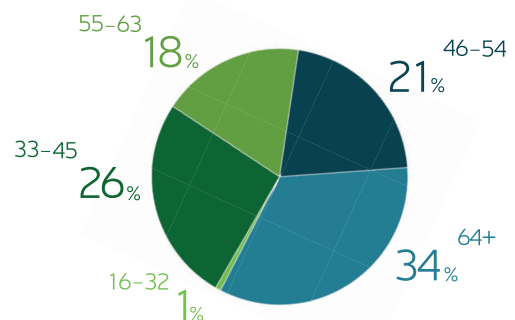


**199 travel hours** saved by patients completing their health questionnaire at home



**5,271 travel miles** saved by patients completing their health questionnaire at home

## Synopsis Home - Age of Users



## Project Awards





# Synopsis

A VitalHub Company

## About Synopsis

The Synopsis Platform enables hospitals to manage the entire pre-operative assessment process digitally, removing paper trail, increasing data security, and delivering significant organisational benefits - including clear economic benefits.

Synopsis has been used by the NHS to complete over 300,000 patient pre-operative assessments, contributing to an average annual saving of £1.4m per trust.

Savings are generated by an average 20% reduction in last-minute cancellations of surgery and further administration time reductions, which releases nursing time back to the departments.

Synopsis is a VitalHub company.

