CASE STUDY **JOHNS HOPKINS ACG® SYSTEM**
IN COLLABORATION WITH GRAPHNET HEALTH
& BUCKINGHAMSHIRE HEALTHCARE NHS TRUST

Buckinghamshire Healthcare NHS Trust uses advanced risk stratification to improve surgical readiness and perioperative care



At a glance

Buckinghamshire Healthcare NHS Trust (BHT) partnered with Graphnet Health, using the Johns Hopkins ACG System to create a digital dashboard that combines surgical waiting lists with clinical, social care and demographic data in BHT's Shared Care Record.

Using advanced risk stratification, clinicians can identify patients who need additional support before surgery and improve patient care.

Challenges

BHT needed a better way, beyond the standard chronic condition register, to understand the health and care needs of patients waiting for surgery. Without a clear view of patient risk and complexity, clinicians could not easily identify which patients needed additional preparation or optimization before surgery and where clinical resources should be focused to have the greatest impact.

The existing process also relied on manual review and duplicate medical and medication histories across systems, which raised questions about the accuracy of the waiting list.

KEY METRICS

Implementation of the perioperative assessment dashboard resulted in:

Identification of 44% of patients on the surgical waiting list with one or more health factors that could benefit from optimization before surgery

45% greater clinic capacity, 30% higher nurse productivity and reduction in last-minute surgical cancellations

15+ hours of nursing time saved per 100 patients through automated digital triage processes

Contact us today to learn more.

hopkinsacg.org acginfo@jh.edu

JOHNS HOPKINS MEDICINE

Solutions

Led by Dr. Caroline Pritchard, Consultant Anesthetist and Perioperative Service Clinical Lead, the BHT team collaborated with Graphnet Health to develop a digital perioperative dashboard that integrates operational and clinical data within BHT's Shared Care Record. Using this rich dataset and incorporating ACG System risk markers — including Patient Need Groups (PNGs), Expanded Diagnostic Clusters (EDCs), the Mortality Risk Score and predictive models for hospitalization — the dashboard provides a real-time view of patient risk and surgical readiness.

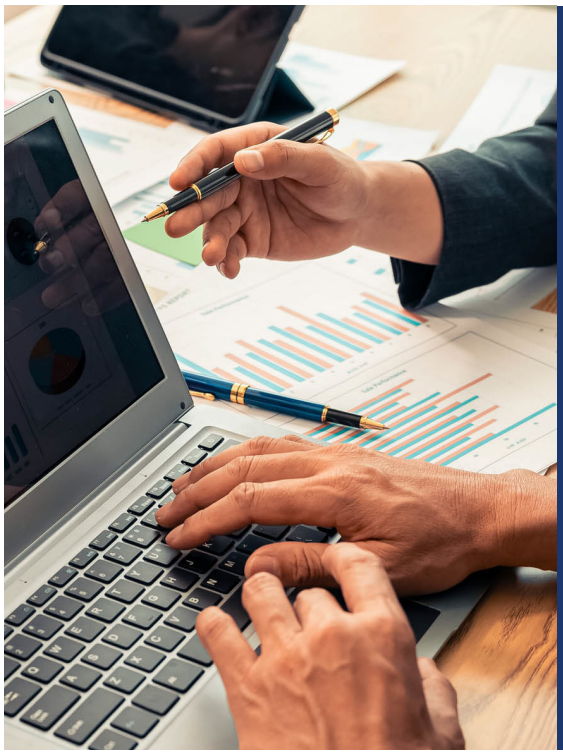
The perioperative dashboard reduces manual review and duplicate assessments while helping BHT make better use of surgical capacity. Lower-risk patients can be booked into available appointments, including cancellations, while high-risk patients are identified earlier and directed to appropriate preoperative support to ensure surgical readiness and optimized patient outcomes.

This enables clinicians to focus resources where they are most needed and supports more efficient, patient-centered care.

"It has been truly transformative. Prior to this work we didn't know how much support was needed to get people ready for surgery.

Now we can see the population, and we can understand their needs for the first time, which means we can target our resources in the right place."

DR. CAROLINE PRITCHARD
Consultant Anesthetist and
Perioperative Service Clinical Lead,
Buckinghamshire Healthcare NHS Trust



BENEFITS

- **Earlier identification of patient needs**
  enables targeted preoperative optimization, coaching, and support in community settings
- **More personalized care**
  based on a comprehensive view of each patient's health, medical complexity and social needs
- **More efficient use of clinical resources**
  by reducing unnecessary assessments and focusing staff time where it is most needed
- **Improved surgical capacity and patient flow**
  with improved care coordination and communication across teams

Contact us today to learn more.

hopkinsacg.org acginfo@jh.edu

JOHNS HOPKINS MEDICINE