

Case Study: Transforming Patient Care at Brookside Surgery through Digital Triage and Segmentation

Overview:

[Brookside Group Practice](#) in Berkshire has significantly improved patient access, care continuity and outcomes by implementing an innovative non-clinician triage model. The practice have worked to create a digital triage and segmentation solution, integrating the Johns Hopkins ACG® System patient segmentation model within the Frimley ICS and Partners Connected Care population health management (PHM) platform and the Anima digital triage platform.

This innovative approach brings together a RAG (Red, Amber, Green) rating for both patient conditions and overall patient needs, optimising care prioritisation – a first of type integration in the UK.

Using these digital tools and their Patient Health Teams Model (PHT), the whole team can now prioritise the care they give to patients, to deliver the right care at the right time, at the right place with the right person. This streamlines and reduces workload for clinicians and the reception staff who are booking the appointments.

The practice recently won a prestigious HSJ award for their work in the 'Improving Primary Care Through Digital' category. This surgery is part of the [Buckinghamshire, Oxfordshire and Berkshire West \(BOB\) Integrated Care System](#).



The Challenge

During the COVID-19 pandemic, Brookside Surgery, like many other practices, faced challenges in maintaining continuity of care and providing timely access to health care services, with patients not always able to see the same GP or clinician.

The surgery wanted to address several issues, to increase triage efficiency, offer greater continuity, reduce phone queuing time, reduce clinician administration and to further improve the safety and equity of the triage process.

The Solution

The team at Brookside Surgery addressed these challenges by developing an integrated digital triage and segmentation solution tailored to meet their patients' needs.

Dr Amit Sharma, GP Partner and Strategy Lead, Natasha Poller, Digital Transformation Manager and Dr Alison Malcolm, GP Partner, Digital and IT Portfolio Lead at Brookside Surgery Group Practice led the work and collaborated with digital triage provider Anima, GP solution provider EMIS, Connected Care's PHM team, and the Johns Hopkins ACG System's PNG (Patient Need Groups) solution to create a robust system that helps the non-clinical triage team to identify high-risk patients and ensure they receive timely care.

The resulting solution means that a patient's segmentation at a point in time is combined with their presenting problem and so combines historical patient data with presenting issues to assess risk and prioritise care.

Implementation and results: How does the new solution work?



Patient request and reception review:

Patients access the surgery through online forms, telephone calls, or in-person visits. Each request is reviewed by the reception team, where a non-clinician triage process takes place. The team assesses the symptoms and checks for any red flags.



RAG rating system:

When they receive an online request, in-person visit, or telephone call, the reception staff uses the patient's medical record to assess the complexity of the case at a glance using the RAG rating system to determine the urgency and complexity of each case. This RAG rating applies to both the presenting condition and PNGs, allowing reception staff to determine the appropriate clinical staff member for an appointment.



Routine appointments:

If the case is routine (rated as Amber or Green), the patient will receive a text message allowing them to book an appointment with the appropriate clinician.



Filtering for appointments:

The practice's system filters available appointments to ensure patients are booked with the correct team or clinician, improving continuity and reducing the administrative burden on clinicians.

The PHT model of care splits patients into teams including a Partner, an Associate, a Physician Associate, a Social Prescriber and a Patient Services Liaison (member of the reception team). Pharmacists, nursing, paramedics for visiting, mental health practitioner, HCAs, MSK services, dermatology, gynaecology and other roles all wrap around the core PHT model. By using these tools, the surgery improves continuity, reduces clinician admin and makes best use of roles.



Dr Amit Sharma, GP Partner and Strategy Lead at Brookside Surgery, says:

'Segmentation and digital triage are tools that can transform care delivery, whatever the context.'

Outcomes and benefits of the new solution

The implementation of digital triage and patient segmentation has led to numerous benefits for the surgery and its patients.

Improved patient access:

The streamlined processes have reduced waiting times and increased patient satisfaction, ensuring that care is accessible when needed.

Enhanced continuity of care:

Patients now experience enhanced continuity, being managed by a dedicated care team that understands their history and current needs.

Clinicians have more comprehensive clinical information:

This enables them to make better-informed decisions. The system has also facilitated better workforce development, with GPs taking on enhanced supervisory roles. Clinicians gain a more detailed picture of the patient's problem at a glance, without opening separate documents and reading lengthy free text answers.

Administration team can access clinicians — but this is not needed as much due to the effective triage set up.

Reducing unnecessary appointments:

The solution has enabled the team to ensure the appropriate tests are completed before an appointment is booked (e.g., blood tests or photos).

Reducing administrative burden on clinicians:

As part of the PHT model, the team has trained Patient Services Liaison staff.

Operational efficiency:

The practice has achieved better workflow management, particularly in handling on-the-day care requests and managing long-term conditions. Patient segmentation and risk stratification has allowed the practice to prioritise patients effectively, improving overall efficiency.

Improving equity for patients:

To prioritise those most unwell, all requests need to come through the same system.

Time saving in admin teams and improved continuity:

Appointment allocation is much slicker and more efficient, as you can now send the patient a text to book an appointment, while specifying the type of appointment as well as the clinician and time frame. This increases continuity as patients can only book with the appropriate team or clinician.



Natasha Poller, digital transformation manager, Brookside Surgery Group says:

'Segmentation has made a huge difference to how we do our triage, and that's made a massive difference in terms of our continuity for patients and means that we can catch diagnoses much earlier.'

Dr Alison Malcolm says:

'This model provides everyone with what they need most from general practice: continuity for those with greater health needs and convenience for those who are generally healthy with busy lives.'



Dr Sharma continues:

'As GPs in the supervision role at a practice, we've been able to gain benefits because we can manage our flows much better. We're more efficient with how we work through particularly our on the day work, but also our long term conditions. Now patients are all risk assessed along the same triage method, which means that everybody has the right chance to get the care that they need and it's prioritised.'



Patient comments include:

'Appointment booked! I found the system easy to use. I had a response within 15 minutes and a face-to-face appointment within two hours. Just what I needed as I was quite worried about my condition.'

Online Access: Over 75% of patients now use an online form to access care, which integrates with a risk dashboard created within the surgery's system.

Continuity

Figure 1 illustrates that between April and November 2023, the percentage of patients seeing the same Primary Health Team increased from an average of 33% to an average of 66%.

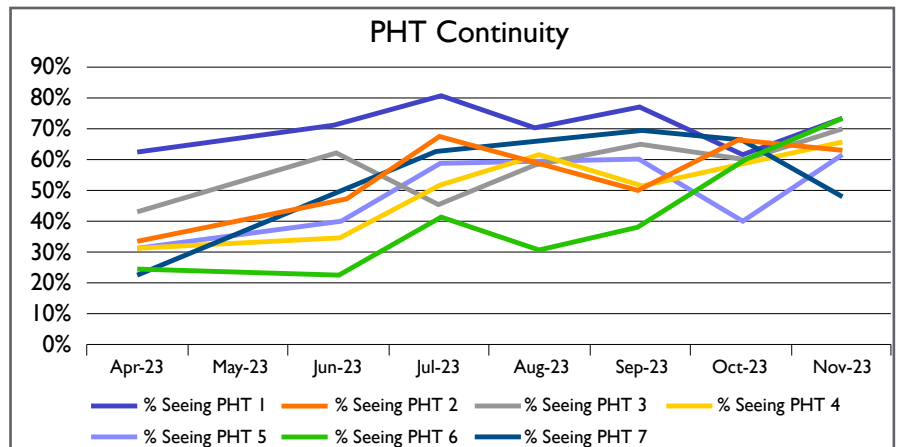


Figure 1

Telephone Access: With the rise of online access, the average call waiting time decreased from 18 minutes in January 2023 to just 4 minutes by December 2023, improving the experience for patients who prefer telephonic consultation.



Patient comments include:

'Brookside Practice has excelled at putting patients first, and ensuring the patient's needs are prioritised by administering the right care at the right time in the right place, be it face-to-face or online consultation.'

Future Directions

Brookside Surgery is recognised as an exemplar in the health care system, with discussions underway to expand the use of segmentation and digital triage across Berkshire West, as the team has demonstrated that their excellent work can be replicated elsewhere.

Dr Amit Sharma concludes: 'We have led in the adopting of segmentation across Berkshire West and BOB ICS and working with other PCNs and Practices along with others to implement a similar approach. We're working with our local acute hospital to see if this can be developed in the acute hospital trust to extend into secondary care ED, outpatient emergency department, and other outpatient departments. We are also aiming to direct national policy on this method and the use of segmentation.

We are maximising on the delivery of modern general practice, as well as looking at whether SCAS III service can include segmentation and for this to be the regional 'clinical currency' that all health providers utilise.'

Brookside Surgery's excellent work and collaborative approach demonstrates how innovative digital tools can transform primary care. By improving access, continuity, and workflow efficiency, the practice has not only enhanced patient outcomes but also set a benchmark for others to follow.

Video: [Brookside Surgery - Segmentation - Digital Triage in Primary Care \(v1.2\) \(youtube.com\)](https://www.youtube.com/watch?v=...)

Special thanks to:



ABOUT THE JOHNS HOPKINS ACG SYSTEM:

The ACG System is a flexible, transparent set of tools developed and validated by scientists and clinicians at the Johns Hopkins Bloomberg School of Public Health. Customers use the ACG System to segment their patient populations and to process their organization's existing medical, pharmacy and lab data to generate clinical risk markers and

predictive models at the population and patient level. The ACG System provides health care analytics teams with the insights they need to inform rapid decisions about patient care, resource planning and service design.



To learn more about the ACG System please visit hopkinsacg.org or email acginfo@jh.edu.
If you are an ACG customer, please contact your account manager.