

Innovate

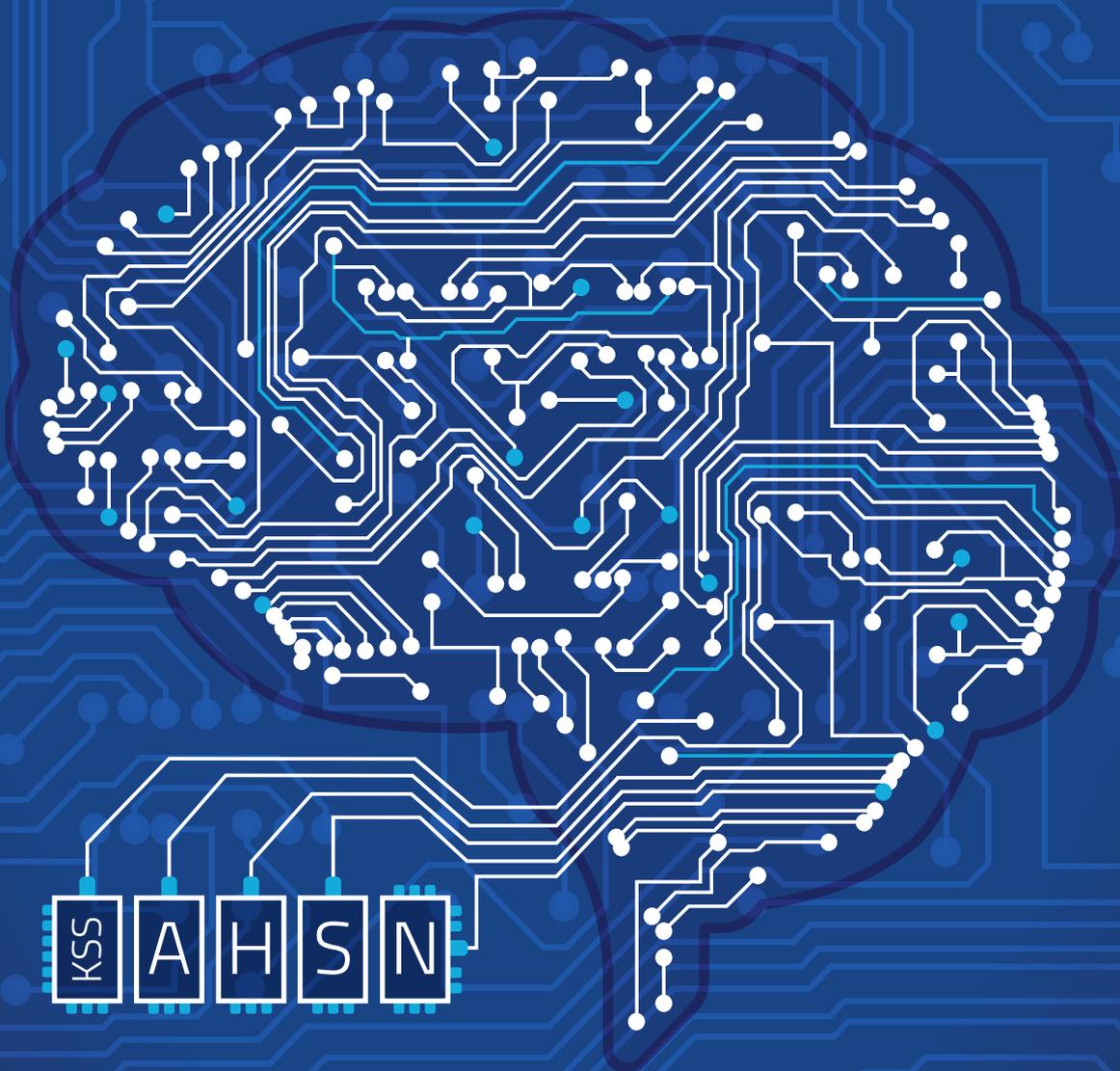
Issue 12

Summer 2018

Innovation | Improvement | Impact

Inside

- 2 Funding opportunities
- 3 Insight
- 4 Adopting innovations
- 6 Our journey
- 8 AI
- 10 Stroke review
- 12 Surrey Heartlands
- 14 Flare to Care
- 16 AHSN Network news
- 18 Safety Culture
- 19 Upcoming events



Taking the lead on AI

Artificial Intelligence in healthcare

Flare to Care – a patient centred approach

An online platform that empowers patients to play an active role in managing their disease, as well as offering them access to innovative treatments, is being extended across Surrey and Sussex Hospital Trust.

Ulcerative Colitis and Crohn's Disease are the two main forms of Inflammatory Bowel Disease (IBD), affecting more than 300,000 people in the UK.

Symptoms of IBD can flare up at any time, and it's vital that patients receive treatment promptly at the time of the flare – something which the conventional diary-based outpatient model cannot always accommodate.

To date, more than 400 patients at East Surrey Hospital have been using Patients Know Best (PKB) - an online platform that gives patients full control of their medical records and a range of tools - to help them better self-manage their condition and remotely communicate with their clinical teams, if and when they need.

Creating 4,000 expert patients

PKB was rolled out to approximately 4,000 IBD patients across Surrey and Sussex Healthcare NHS Trust (SASH) as a pilot project initially funded by Janssen, a pharmaceutical company of Johnson & Johnson, and subsequently supported by local Clinical Commissioning Groups.

The trial is part of a wider initiative to harness technology and empower patients, giving them greater control over their own health and treatment.

Dr Azhar Ansari, project lead and consultant gastroenterologist at SASH said that IBD is a complex, long-term condition that requires clinicians to be in close, regular contact with the patient.

"Patients often experience distressing flare-ups of the disease which can require urgent hospitalisation," he said.

"However, through using PKB, the patient can self manage their condition far more effectively and warn us before problems occur. In many cases we can avoid A&E visits and that's good news for the patient – and for our hospital."

Building on success

Traditionally IBD patients would be offered azathioprine, the side effects of which can cause up to 50% of patients having to swap to an expensive monoclonal therapy.

Instead, patients are given a lower dose of azathioprine combined with allopurinol. The effective, low cost treatment is better tolerated by the majority of patients, compared to azathioprine on its own.

Prior to treatment, a simple and readily available blood test that checks for an enzyme level encoded by the TPMT gene can show how an individual will more accurately process azathioprine. The dose can then be lowered to a level that the patient can tolerate, but still derive clinical benefit from.

PKB has allowed Dr Ansari and his team to undertake the mandatory monitoring of azathioprine at scale non-face-to-face. Patients can quickly flag up side effects via PKB, enabling early intervention for those that need it.

"The cost implication is huge, as the next line of treatment for those taking

azathioprine only is a monoclonal therapy, which can cost £10-15000 a year," Dr Ansari explained.

"The combined low-dose azathioprine allopurinol treatment costs £200 a year, and is delivered as a daily tablet, rather than an injection or hospital-based infusion. The economic cost to the patient is therefore greatly reduced, as they don't need to take time off work for their treatment."

Workforce benefits

The approach is paying dividends for patients and the hospital. ESH has around 4,000 IBD patients, and the national IBD Standards published by the British Society of Gastroenterologists recommend a clinic that size would need four full time IBD consultants and three IBD Clinical Nurse Specialists.

Dr Ansari's team is half that size and has been able to provide excellent care thanks to the fact that patients with the most severe form of IBD are able to benefit from the combined therapy and PKB. In order to become a resilient service as more patients enrol onto PKB, further clinical nurse specialists and administration staff are required but without the increase in consultant staff. Through consultant supervision, clinical nurse specialists and administrators upskill in IBD enabling the service to develop its out-of-hospital experience.

	Azathioprine/6-Mercaptopurine (6MP) at full dose, single therapy	Low dose AZA/6MP with Allopurinol (LDAA)
Time to full effect if tolerated	12-14 weeks	Within 12 weeks
Overall side effect rate	40%	5-10%
Overall positive response to treatment	40-50%	70-75%
Need for recurrent hospital visits or advice	50-60%	20-25%
Impact on days off work to attend hospital appointments related to treatment	On average 4-7 days/year	On average 1-2 days/year
Estimated cost avoidance through LDAA use versus single therapy for the SASH population (high cost drugs, hospitalisation, operations) - £4,000,000		

As well as representing a shift in the model of care provided, this approach also needs a new strategy when it comes to funding.

"What we're doing at ESH strips out the 12 month follow up system, which is an obsolete way of running a service," Dr Ansari explained.

"But what this means is that rather than funding the service based on activity, Clinical Commissioning Groups need to look at a value-based or outcome-based model of funding.

"Our outpatient clinics will always be at capacity, but this is an opportunity to free up space for patients that need to be seen immediately, and provide an alternative for those with less severe symptoms not needing face-to-face appointments."

KSS AHSN support

Commenting on the initiative Guy Boersma, Managing Director at KSS AHSN, said:

"By using existing drugs in a new way, and bringing in new technology that allows patients to monitor and better understand their condition, we are seeing a real step change in the way the patients with IBD are being treated.

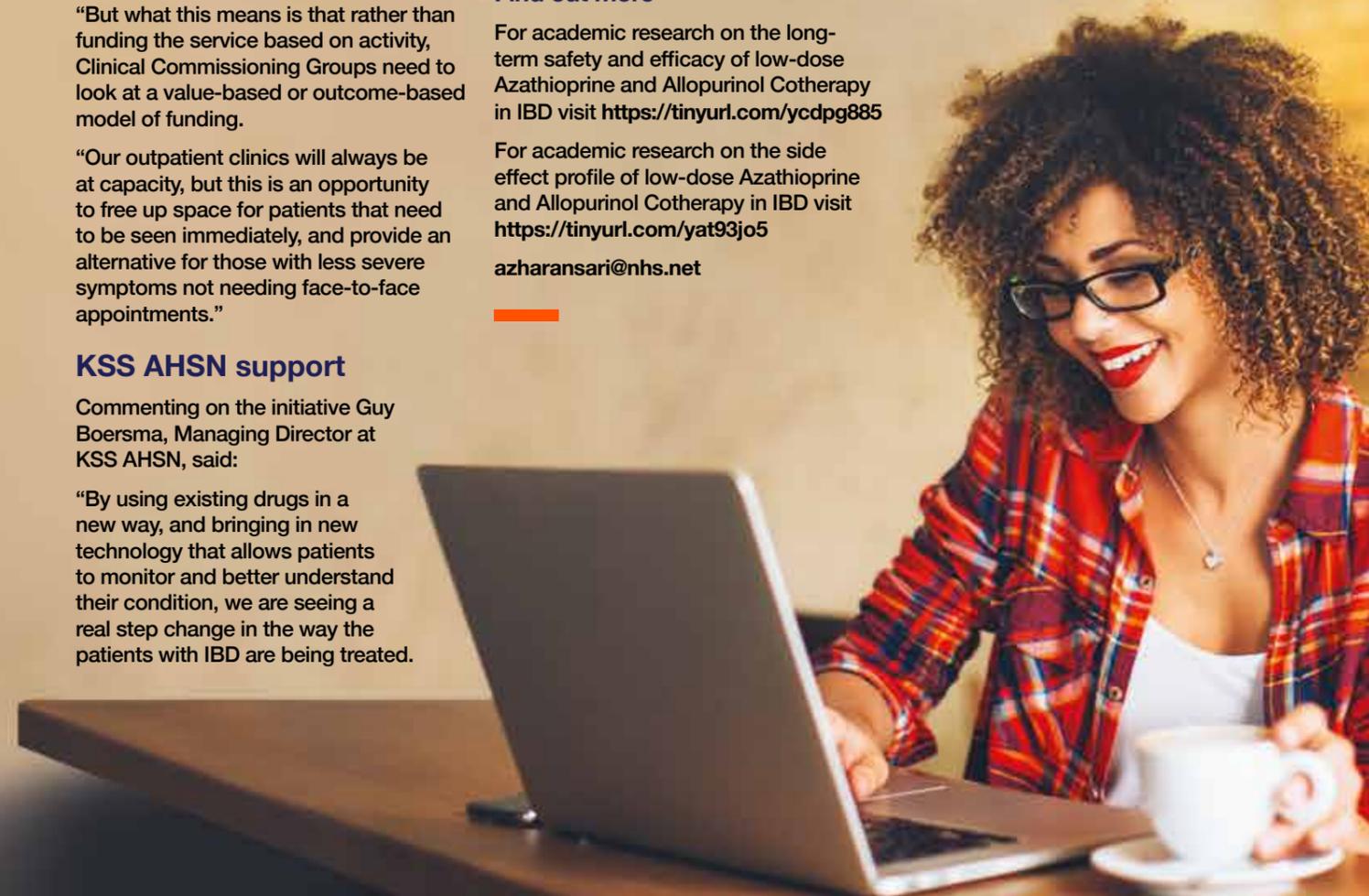
"This is exactly the kind of innovative approach that AHSNs are keen to promote, and we're thrilled to be supporting Dr Ansari in this work."

Find out more

For academic research on the long-term safety and efficacy of low-dose Azathioprine and Allopurinol Cotherapy in IBD visit <https://tinyurl.com/ycdpg885>

For academic research on the side effect profile of low-dose Azathioprine and Allopurinol Cotherapy in IBD visit <https://tinyurl.com/yat93jo5>

azharansari@nhs.net





Innovation surgeries:

bridging the gap between industry and the NHS

“The workshop helped us define a strategy to approach the NHS, and more importantly stopped us from going down dead-ends, and losing time.”

Entrepreneur and CEO
digital health company

“The surgery was invaluable in helping us to develop our insights, challenge our assumptions and highlight the areas we need to focus on.”

Director, specialist pharmacy

Do you have a new product or technology ready for use in the NHS?

Are you trying to find your way through the healthcare maze?

Struggling to make sense of NHS finances?

“The surgery provided a valuable insight into the NHS purchasing methodology and budget status. To have access to such experienced experts via a free to join membership organisation is remarkable in today’s world.”

CEO medical device design company

Our new innovation surgeries can help. They aim to enable more patients to benefit more quickly from innovative products, treatment and technology.

Designed for companies with products on or near to market, each innovation surgery offers a confidential 60 minute discussion about topics such as:

- how healthcare funding might impact on your plans to sell to the NHS

- advice on approaching healthcare purchasers, and
- assessing your value proposition.

Advice is available for companies from every sector of the healthcare market.

To find out more, or to book, please email vivienne.gray3@nhs.net

