

PATIENT FLOW

MAY 2023

Contents

Foreword	4
Introduction	5
The view from Sarah-Jane Marsh	8
1 Community diagnostic centre, Barking, Havering and Redbridge University Hospitals NHS Trust	11
2 Same day emergency care, The Mid Yorkshire Hospitals NHS Trust	13
3 Tracking patient flow across a region, South West Provider Collaborative	16
4 Provider collaborative, Leicestershire Partnership NHS Trust and Northamptonshire Healthcare NHS Foundation Trust	18
5 Population health, Yorkshire Ambulance Service NHS Trust	20
Conclusion	23
References	24



The Providers Deliver series gives us a great opportunity to stand back and celebrate some of the extraordinary work that trusts and their staff do, often in difficult circumstances.

This time we're looking at the vitally important issue of 'patient flow'. All too often attention is drawn exclusively to headline waiting times in urgent and emergency care, but we know the drivers of long-waits and delays for patients are complex with no one single solution and that they impact acute, mental health, community and ambulance services.

Demographic changes, deteriorating population health and widening health inequalities over recent years mean demand for all health and care services has risen. Patients are presenting with greater acuity and complex needs often exacerbated by a broader cost of living crisis. At the same time, insufficient capacity, resources and investment across health and care services, including in social care, mental health and community care services, mean people too often experience a delay in accessing the care they need and in being discharged from hospital.

A lack of capacity in community and mental health care can also limit the NHS' ability to offer preventative care and reduce avoidable hospital admissions.

These are all factors driving very high bed occupancy rates, which in turn means admissions are delayed and urgent and emergency care pathways become overstretched, creating a pressurised working environment for staff and unacceptable delays for patients.

In this challenging context, we deliberately set out to highlight some of the practical steps and innovations trusts have taken to improve how patients get the care they need, in the right place at the right time.

The case studies in this report show how trusts are working collaboratively to prevent avoidable admissions, manage demand more effectively, build additional capacity sustainably, use technology to deliver more care in community settings, and deliver real improvements in patients' experience of accessing the health and care they need in a timely way.

In the most challenging of circumstances trusts, and their staff, continue to innovate. As the NHS works towards sustainable recovery from the pandemic and to reduce waiting times for all services, it is clear that a preventative whole-system approach will be key. With the right support, trusts are well positioned to deliver.

A handwritten signature in black ink that reads "Julian Hartley". The signature is fluid and cursive, with the first letters of the first and last names being significantly larger and more prominent.

Sir Julian Hartley
Chief Executive
NHS Providers

Introduction

The last year has seen the NHS begin recovering from the impact of the pandemic, while demand for urgent and emergency care and mental health services hit record peaks.

These demand-driven pressures are affecting all NHS services across hospitals, mental health, community, and ambulance sectors. What is more, they are compounded by a persistent workforce shortfall with over 124,000 vacancies in the NHS and more in social care.

The case studies in this report, demonstrate that trusts continue to deliver and innovate within this challenging context. Some of the key themes to emerge include:

Autonomy and leadership

Approaches to leadership that promoted the autonomy of clinical staff, while protecting them from some of the bureaucratic burden that can slow down patient flow, was a recurrent theme.

The value of collaboration

No single organisation can resolve these long-standing, systemic issues on their own. Trust leaders understand that working collaboratively across systems with other providers and partners, including primary care and social care, using existing capacity effectively, focusing on prevention and effective demand management, are key to improving patient flow.

A focus on admission avoidance

Delivering more out-of-hospital procedures or using an ambulatory care pathway has proven to be an effective way of reducing unnecessary admissions, offering the same standard of treatment more efficiently for patients while freeing up inpatient capacity.

Prioritising care at home and intermediate care

Virtual wards and remote monitoring of patients has proven to be an effective way of moving more care into community settings, reducing average length of stay, supporting intermediate care and rehabilitation, and improving people's experiences of care.

Similarly, building outpatient capacity, including developing the community workforce, can see more complex care including mental health care delivered outside of traditional hospital settings, allowing people to remain more independent, or close to family, in familiar surroundings at home while accessing the support they require.

The importance of population health approaches

The core purpose of the health service is to improve health as well as treating illness. Trusts able to use population health approaches to design services around the specific needs and demands of the communities they serve, are seeing the benefits. Trusts reported real value in the effective use of analytical methods to identify and predict demand, working with partners on preventative initiatives to support patients before they reached crisis.

A long road ahead

NHS England's two-year urgent and emergency care recovery plan sets out a range of headline targets for both ambulance response and A&E waiting times to ensure a swift response for patients most at risk. Importantly, the plan also recognises the solutions for tackling long waits for urgent and emergency care must involve system partners and also include a focus on the development of pathways for patients who do not require an ambulance response or hospital care.

Achieving a lasting and sustainable recovery will take years, but it will also require collaboration and action across the entire provider sector and with integrated care system (ICS) colleagues. Trust leaders are keenly aware of this, as demonstrated in these case studies.

However, in the medium to long term, national action to ensure better workforce planning, capital investment and expanded capacity remain key to success.

The infographic below shows key pressures and pinch points charting patient journeys across the health and care system.

RISING DEMAND AND DELAYS

at every stage of the
patient journey

21%
growth in potentially
avoidable admissions
between 2011 and 2020

calls received by
ambulance trusts
in December 2022

1.3m



90

minutes average
category two response
time in December 2022



170,000

hours lost to ambulance handover
delays in December 2022



Double

the number of young
people with a mental
health condition
between 2017
and 2022

50%



increase in people
waiting for diagnostic tests
over the last decade

16%



increase in people
using NHS mental
health services from
2020/21 to 2021/22



waiting for community
care in December 2022

850,000



2.3m

peak A&E attendances
in December 2022

94%

average general and
acute bed occupancy
winter 2022/23



13,000

people experiencing a
delayed discharge per
day over winter 2022/23



24%

increase in people
spending more than
21 days in hospital in
winter 2022/23 compared
to previous year

2m
requests
for social care
in 2021/22



For a full list of sources please view the references section.

The view from Sarah-Jane Marsh



National Director of Urgent and Emergency Care
and Deputy Chief Operating Officer, NHS England

I need not tell you all about the immense pressure that the NHS has been under recently – and for colleagues in urgent and emergency care services how intensely that pressure has been felt.

Whilst this has been true in all parts of the integrated urgent and emergency care system, ambulance services and emergency departments, in particular, have experienced the most visible evidence of the problems that insufficient capacity and flow can bring for patients and their families.

Our vision for urgent and emergency care is that everyone has access to high quality services in a timely manner, regardless of how they are accessed. The moment has come to collectively act and bring that vision to life, doing all we can to improve our services within the resources available.

Published at the end of January the **Delivery Plan for Recovering Urgent and Emergency Care Services** sets out our commitment to improving all parts of the urgent and emergency care pathway, providing the right services to keep patients at home or in the community whenever possible, and when they do need the help of an ambulance, hospital or intermediate care service to provide it efficiently and to the highest standards.

Before this coming winter there will be hundreds of new ambulances and mental health response vehicles on the road, together with thousands more hospital, intermediate care and virtual ward beds, with more specialist clinicians to join teams in 111 and 999 control centres.

But this isn't just about more, it's also about joining up care, particularly in the community and with our colleagues in social care – as we promote a whole system approach.

It will take strong partnerships between acute, community and mental health providers, primary care, social care and the voluntary sector, to ensure a system that provides more, and better, care in people's homes; gets ambulances to people more quickly when they need them, sees people faster when they go to hospital and helps people safely leave hospital having received the care they need.

The last of these elements is vital for quality as hospitals are not the best place to be for people medically ready for discharge, indeed in many examples across the country we know that for some of the patients who stay the longest, their admission could have been avoided in the first place.

So ahead of winter we will also continue to expand care outside hospital including increasing the use of urgent community response, falls services and enhanced support to nursing homes, as well as rolling out adult and paediatric acute respiratory infection (ARI) hubs which are so vital in advance of surges in respiratory illness.

Our commitment as the national integrated urgent and emergency care team is to support every region, system and provider in the best way for them and the populations they serve, sharing best practice and highlighting opportunities for improvement, especially where variation exists.

I know from many conversations and actions that have already taken place, teams across the country have willingly accepted the challenge to deliver the level of transformation set out in the plan.

I also know that this is not easy, and that we are often delivering care in situations that are far from ideal, and I see the personal toll it takes on committed professionals when they cannot provide the care they aspire to.

Together I know we can address and overcome the challenges we face, deliver the commitments in the plan, and ultimately build a transformed system that we can all be proud of.

I look forward to meeting and working with as many of you as possible as I settle into my new role at NHS England.

Community diagnostic centre

Barking, Havering and Redbridge University Hospitals NHS Trust



NHS
Barking, Havering and Redbridge
University Hospitals
NHS Trust

Themes >

- Diagnostics
- Place-based approaches
- Capital and capacity

Background

The Barking, Havering and Redbridge University Hospitals NHS Trust (BHRUT) is a large acute provider, whose services span outer north-east London.

The communities served by BHRUT are diverse and include some of the most deprived neighbourhoods in the country. As with many other areas, BHRUT saw a substantial increase in the backlog for diagnostic tests during the Covid-19 pandemic (lack of access to timely tests is associated with worse health outcomes and widening inequalities) and expects demand to grow further over the coming years.

In response, Barking Community Hospital (BCH) was selected to host a new Community Diagnostic Centre (CDC) in 2021.

CDCs were first developed following recommendations from Sir Mike Richards' review in 2020 ([Diagnostics: Recovery and renewal – report of the independent review of diagnostic services for NHS England](#)), and the BCH CDC was established prior to the integrated care board (ICB) for north-east London being formally established.

In its first two years of operation, the BCH CDC improved access and reduced waiting times for vital tests for cancers and cardiovascular conditions. These are major drivers of health inequalities, and if diagnosed too late will translate to worse population health outcomes and more acute presentations elsewhere.

Region – system – place

Initially, planning for CDCs had been done at a regional level, by NHS London who oversaw the network of non-statutory Sustainability and Transformation Partnerships (STPs) across Greater London.

Ann Hepworth, BHRUT's director of strategy and partnerships said: "As we began to work as a system, support and oversight from the regional body, NHS London, was key to facilitating population health focus and helping to ensure that resources were allocated equitably." As the system matured and became a statutory ICB, this paved the way for more local autonomy and decision making at system level.

Regional support made the process of developing, designing and implementing the CDC model more straightforward. As the system matured and took greater ownership of decision making, it allowed more place-based working – where the trust works more closely with the communities it serves; creating services that are meeting their needs and preferences.

The importance of public engagement

The decision to locate the new CDC at BCH followed an extensive period of public consultation, engagement and assessment of need.

Ann said the public response to the proposal had been 'overwhelmingly supportive'. This area has historically been under-served by health and other public services. As such, the community were highly appreciative, as too were colleagues in local government.

This highlights how planning and developing services with community engagement, as well as identifying unmet, or under-met need, can result in improved access to services and higher public satisfaction.

'Hardware and money has to come first'

Joseph Huang, BHRUT's clinical group director for cancer and clinical support, explained that frontloaded capital investment had been key to the successful development of the CDC.

Joseph said: "The hardware and money have to come first. Once you have the capacity in terms of CT-scanners and MRI machines, you can start to think about workforce and utilisation."

Recruitment and upskilling of allied health professionals (AHPs) came next. Bringing people in to use existing diagnostic equipment was a more efficient way of starting the CDC and helped ensure the workforce was delivering care shortly after they were onboarded, rather than waiting for capital investment once in post.

Both Joseph and Ann described the very positive impact working in the CDC had on staff morale and job satisfaction. The CDC and its additional capacity mean valuable diagnostic work can happen in a timely and calm manner. While staff are working hard, they take a lot of job satisfaction from the work they do and see the positive impact it has for patients.

Next steps

The future of BCH CDC depends on funding. The start-up capital investment was vital, but future revenue funding as well as ongoing investment in maintaining diagnostic equipment will be key.

So far, the CDC has proved the hypothesis that increased capacity leads to improved access. This will be vital to building a clear and impactful business case for ongoing investment and development of the CDC.

While improved access is a short-term measure of success, greater diagnostic capacity and focusing on improving access in underserved more deprived areas, should translate to population health improvement. This is the true goal of the BCH CDC; improved health and narrowed health inequalities. The route to this is via improved access, reduced waiting times and better patient flow.

Same day emergency care

The Mid Yorkshire Hospitals NHS Trust



Themes >

- Partnership working
- Admission avoidance
- Leadership and culture

Background

The Mid Yorkshire Hospitals NHS Trust (MYHT) is a large acute provider, working across three hospital sites. They also provide community services within the West Yorkshire Health and Care Partnership integrated care system footprint.

Pinderfields Hospital is the largest of the trust's three hospitals, providing a broad range of specialist, emergency and critical care services. It is also the site of the trust's same day emergency care (SDEC) service.

Same day emergency care: an evolving national policy

The central principle of an SDEC service is that a substantial proportion of adults who require ambulatory emergency care can be cared for safely and appropriately on the same day without an admission to hospital.

While MYHTs SDEC had been in place for some time, at a national level more focus is being put on this model and more trusts are looking to develop their own SDEC. NHS England's (NHSE's) plan to recover performance standards in urgent and emergency care highlights the use of SDEC as a key enabler.

There are significant benefits associated with SDEC, including shorter waiting times, reduced unplanned admissions as well as a reduced average length of stay. It also means patients can receive the care they need without the associated risks of an acute hospital admission. For some patients a risk of deconditioning and a detrimental impact to their overall health is therefore avoided.

Since April 2022, MYHTs SDEC service has worked across its surgical and medical divisions. It is overseen by two clinical leads; they have focused on building a multi-disciplinary workforce and developing their advanced clinical practitioner's role to offer an extended range of services.

The medical SDEC team had struggled to find a permanent location for their service. It became clear that what was needed was a facility, outside the emergency department (ED) without beds – this effectively safeguards against the possibility of the SDEC becoming overflow capacity at times of very high demand. This was secured in the summer of 2022 and has proved invaluable in supporting the developments of the service.

Working across the system: communicating the value of SDEC

Jo Halliwell, the trust's deputy chief operating officer, explained one of the key challenges and enablers of running a successful SDEC was in how the service offer is communicated, not just to patients and the public, but also to partners within the trust and across the local health and care system.

Jo told us: "Making it easy to refer to the SDEC was essential; de-formalising the process and creating a culture of clinical respect, where we didn't criticise primary care for making referrals that weren't right for SDEC – but instead explained what kind of referrals we're best placed to manage."

Working with colleagues in other departments, as well as community and primary care organisations, to drive appropriate referrals and raise awareness of the service has been vital. Taking time to build these relationships has highlighted the value of the SDEC service and means it is able to pull in a high level of referrals, thereby reducing pressure on other parts of the system as well as improving patient outcomes.

The permanent location and the continued development of the pathways has meant there has been a 17% increase in SDEC activity compared to 2020/21 activity levels. Increases are evident month on month with March 2023 seeing the highest number of patients accessing SDEC on record.

Reducing pressure across urgent and emergency care pathway

The MYHT is one of the busiest type one A&E departments of any trust in its region. Given the volume of activity it manages and pressure on resources in recent years, the SDEC has been vital in helping to manage demand effectively.

The team currently work to a principle of offering SDEC pathways for all suitable patients – so more people avoid admissions, freeing up capacity for those that need it. The trust regularly sees over 100 patients per day through the SDEC facilities, and while like all acute trusts, MYHT saw very high demand during the winter of 2022/23 which led to a deterioration in operational performance, it did better than many comparable organisations.

In short, a high-functioning SDEC service has been effective in reducing demand elsewhere in the trust which has contributed to the resilience of the wider urgent and emergency care system during a very challenging winter.

Leadership and culture are key

Jo and the team at MYHT were keen to stress the importance of empowering, trusting leadership.

The senior leadership team at MYHT have, as Jo explained, taken 'a supportive and enabling approach, rather than a punitive approach to monitoring activity and targets'. There is space for the clinical leadership to focus on delivering patient care while operational colleagues support by ensuring all the elements needed are secured, working together to drive and embed change.

In this culture, clinicians' principal concerns are delivering care and ensuring good outcomes for patients, using the national performance standards as a framework to evidence improvement.

Next steps

Sustaining and building the SDEC service is a key priority for the trust and for its ICB. National policy is clearly aligned to this ambition.

As trusts across the country look to develop and grow their SDEC services, to support efforts to achieve the core performance standards set out in NHSE's urgent and emergency care recovery plan, MYHT will be starting from a strong point of having a well-developed service.

The service has an established location, is well understood and known across their system and also supports the development of the local health and care workforce.

Tracking patient flow across a region

South West Provider Collaborative



Themes >

- Patient data
- Provider collaboration
- Clinical decision-making

Background

The South West Provider Collaborative (SWPC) delivers a shared approach to the commissioning and delivery of specialised mental health services. The Devon Partnership NHS Trust (DPT) is the lead provider, hosting the provider collaborative on behalf of its partners.

Provider collaboratives are a national initiative that have been around almost seven years. The SWPC was one of 10 national pilots and commenced in shadow form as a new care model in October 2016, formally established in 2020.

The SWPC covers a large geography, spanning the majority of the south west region from Cornwall to Gloucestershire (excluding Dorset), and serving a population of over five million. This collaborative partnership commissions a range of specialised mental health services, bringing together NHS and independent sector providers and a community interest company with a focus on ensuring people receive high quality care as close to home as possible.

As health and care organisations have moved to more system-based models of working, the SWPC has begun to benefit from working together in collaboration and at scale.

One of the key enablers of this collaboration has been simplifying and consistently managing the flow of patients through care pathways. The SWPC has implemented a single patient flow management system, used by all their providers. The system only contains patient data that is required as part of the information sharing agreement which has been signed by all partners, in line with General Data Protection Regulation (GDPR) articles six and nine. This supports the patient journey and provides an overview of capacity and demand to support prompt referral, and discharge. This ensures patients are cared for in the right setting for their needs and supports quality assurance, clinical decision making and more efficient use of resources – contributing to improved patient outcomes.

If you can't measure it, you can't improve it

All providers, within the provider collaborative geography, are now utilising and reporting information on patient flow, bed occupancy and capacity in the same way. Having clear, consistent, meaningful and robust data, in real time, has enabled partners and clinicians to have an accurate oversight of the patient journey, ensuring patients receive the right care and treatment in the right place at the right time.

Emma Wright, SWPC project manager, said: "Having an accurate picture of the patient journey, in real time, together with a picture of demand and capacity, means we can support

clinicians to make more informed decisions around people's care and treatment. We can now take a consistent approach to quality assurance and improvement and help support people being cared for in the best place for them, based on their needs."

The SWPC patient flow system has supported and enabled reduced length of stay in inpatient settings and more care being delivered in less restrictive community settings.

Interoperability; the importance of consistency

All the providers within the SWPC use the patient flow management system.

Emma continued: "The system was developed in collaboration with partners, so it had the functionality and features that were required to support the best care possible for patients and was easy to operate and use." A 'bottom-up' approach has meant users of the system find it easy to operate as well as meeting their information requirements to support clinical decision making and having a real time view of the patient journey.

Reducing length of stay, finding efficiencies and improving outcomes

Having an effective patient flow management system has delivered substantial gains in patient experience and outcomes and has delivered efficiencies across the region.

Since it has been operational, the SWPC has made great strides in reducing out of area placements. It has successfully brought back a number of young people who had been placed in services far from home back into the region, closer to friends and their families. Also, when SWPC was first established, over 50% of adult low and medium secure mental health patients were treated out of area. At the end of 2022, the figure was closer to 15%, most of whom are now treated within a natural clinical flow.

As a result of its work, the collaborative has successfully reduced average length of stay and supported people being closer to family and friends. This, in part, has allowed the SWPC to use inpatient capacity more effectively and to invest in community provision and services within its existing commissioning allocation.

The system has been extended to include inpatient care for the most complex and serious (Tier 4) child and adolescent cases (CAMHS) as well as regional commissioning responsibility for inpatient eating disorder services.

Next steps

The patient flow management system within the SWPC is now well established and is gaining in maturity and functionality, which in turn can support clinical decision making.

The next steps will be to continue to improve the system for the benefit of patient care and to improve the user interface for clinicians, supporting improvements in flow management which will benefit patient quality, care and treatment.

Provider collaborative

Leicestershire Partnership NHS Trust and Northamptonshire Healthcare NHS Foundation Trust



Themes >

- Partnership working
 - Virtual wards
- Person-centred care

Background

Leicestershire Partnership NHS Trust (LPT) and Northamptonshire Healthcare NHS Foundation Trust (NHFT) are working together in a group model. In February 2023 they were selected to be part of NHSE's provider collaboratives innovator scheme.

Initially, virtual wards focused on supporting people with lung conditions, respiratory health problems and heart failure. They also support people recovering from Covid-19 related hospitalisations.

Virtual wards were used in the early phase of the pandemic to help increase acute capacity, and throughout to support infection control measures.

More recently, within their ICSs the trusts have expanded their virtual wards capacity and begun developing relationships with other organisations and providers in the area. Taking a whole-system approach, working with colleagues across the NHS, local authorities, housing and community organisations, both trusts have increased out-of-hospital capacity, as a means to reduce average length of stay, improve patient flow and achieve better outcomes.

Results

At both LPT and NHFT, the use of virtual wards has delivered positive results:

- LPT has seen average length of stay for people with pneumonia reduce from twelve to seven days.
- Virtual wards and remote monitoring are associated with improved patient satisfaction, with people who use this model of care reporting they feel both safe and empowered.

The balance of risk and building trust

Both trusts are keen to highlight that moving more care into the community, and closer to people's homes, should be done in a person-centred way with a focus on outcomes, which helps reduce average length of stay, reduce bed occupancy and therefore improves patient flow.

However, making the transition from a hospital-centred model of care to a more community-focused approach with remote monitoring and multi-disciplinary working, is not without challenge or risk. For example, accountability, clinical risk and capacity in the community to respond to deterioration in a person's condition while being monitored remotely on a virtual ward.

Giles West, transformation lead at NHFT explained the vital importance of communicating with staff across the trusts and wider system partners.

Giles said: "Shared learning with clinical teams and commissioners is really important. You don't need to try and do a whole system approach in one go, you can try one area at a time, then test it. Giving teams autonomy is important, they have to tell you within their population, within their parameters, what would work."

This point was echoed by Samantha Leak, director of community health services at LPT. She said: "We need to focus more on prevention and supporting patients to be cared for in their homes." In relation to rising demand she continued: "The easiest solution is to create more beds, but the right solution is to enable better care in the community; we may need to do both in the short term, but we mustn't lose sight of our aim."

In short, one of the key lessons was that to effectively drive change and deliver more care remotely, trust leaders had to take a 'bottom-up' approach to change, working with staff to understand the concerns and challenges they face, to co-produce a solution that works.

In taking this approach, avoiding imposition of a 'top-down' change, the trusts found colleagues were more engaged in the new model and understood the intention behind the wider rollout of virtual wards.

Targets and a caring culture

This 'bottom-up' approach to implementation aligns with the mindset for managing operational performance and working toward national targets.

While the national urgent and emergency care recovery plan recognises the key role reducing bed occupancy plays in improving ambulance response times and A&E waiting times, this is not the principal concern for staff working on the ground.

Instead, the focus is on improving patient experience of care and outcomes, which is done in part by increasing community-based activity.

Next steps

Both LPT and NHFT are planning to further develop their virtual ward reach as one part of an overall approach to moving care closer to home.

There will also be a focus on partnerships, particularly with the urgent community response teams to help make sure people can remain at home, safely, if their condition deteriorates.

Population health

Yorkshire Ambulance Service NHS Trust



Themes >

- Public health approach
- Population segmentation
- Health improvement

Background

The Yorkshire Ambulance Service NHS Trust (YAS) covers three integrated care board (ICB) areas across the Yorkshire and Humber region. It delivers emergency 999 services, NHS 111 services and non-emergency patient transport.

Like all ambulance services in England, as the process of pandemic recovery began, YAS saw a rise in demand alongside an increase in acuity of patients. Taken together, these resulted in deteriorating operational performance. YAS saw both call response times and average handover delays increase from the summer onwards.

Building on learning from the response to Covid-19, YAS has begun to focus on how a population health and health inequalities lens can be applied to managing rising demand, reducing the need to take people to hospital (conveyance rates) and improving population health outcomes.

This allowed YAS to create a clearer picture of demand across the region, understanding the population groups experiencing worse health outcomes and using emergency services more frequently. This information enabled YAS to work with other providers including ICB colleagues to develop preventative approaches to healthcare and improve health.

Predicting demand and managing resource

Ruth Crabtree has been in post as public health lead at YAS since before the Covid-19 pandemic.

While the pandemic highlighted and exacerbated long-standing health inequalities, a lack of data and population health analytics expertise meant the profile and nature of inequalities across communities the trust serves was not well understood.

YAS was able to recruit, on a temporary basis, Verity Bellamy who brought a considerable level of expertise in population health and data analytics (via funding from the Northern Ambulance Alliance (NAA), a partnership of four ambulance trusts). She has been able to use existing data from YAS to create a clear picture of demand for ambulance services across the region.

Verity has been able to show that while demand and overall number of conveyances are substantially higher in more deprived areas, the conveyance rate, or percentage of calls that result in a journey to an emergency department, is actually lower. This still translates

to higher demand at the hospital emergency departments, but also suggests more high-intensity usage of ambulance services and suggests that earlier intervention via preventative services could reduce demand on emergency ambulance services.

These findings allow YAS to more effectively predict and map demand across their patch, while also offering the opportunity to feed population health data into the ICBs they work with. This learning is transferable across ambulance services nationally and Verity has also been working with other NAA trusts to support them with similar analysis.

Reducing conveyance rates and addressing the root causes of demand

Reducing conveyance rates and doing more 'hear and treat' or 'see and treat' is a core priority for the ambulance sector. An enabler of this is having clinical capacity in call centres and in ambulances, to validate calls and patient conditions, and make a judgment on whether conveyance to an emergency department is needed.

YAS shows that as well as clinical capacity, a population health approach using data and data sharing between NHS organisations is key. YAS is now in a position where the data and insights gathered can inform conversations with acute provider trusts and ICB colleagues about managing demand and understanding drivers for conveyance rates and overall demand.

Verity's findings will help support and inform work by partners to engage with communities and gather insight to inform service improvement and development across the system.

Ruth said: "Being able to identify areas and groups that are frequent users of our service means we can have conversations with our system partners to put in preventative, public health measures, which can lead to health improvement and demand reduction."

Improving outcomes and tackling health inequalities

Verity's analysis of population health across the region also highlighted homeless people and people who sleep rough as a key group who experience worse health outcomes and frequently access emergency services.

Commissioners in Hull were receiving feedback from local agencies that there was an issue with the frequency of ambulance service demand and the experience of services among rough sleepers. In response to this, YAS is undertaking a programme of engagement with rough sleepers in the area to better understand the issues.

Data driven insights have confirmed the homeless population across Yorkshire includes a relatively high number of high intensity users of ambulance services. The insight suggests this is a particular issue in Hull. The analysis is being used to inform the engagement with rough sleepers to better understand, and seek to address, this issue.

Verity said: “This shows how data, analytics and a population health approach can be used to inform community engagement; by identifying groups with poor health and most at risk of inequalities – effective community engagement uses those insights to develop more tailored services.”

Next steps

The NAA and YAS have only been able to fund a full-time population health analysis post for a short period.

Developing and maintaining new roles in population health will be vital to build on the insights currently being used. The analysis and population segmentation that has already been done effectively acts as a ‘proof of concept’ – showing how these methods can identify and map demand.

The project in Hull, focusing on high-intensity use of ambulance services among the homeless population, should provide further evidence of how applying an inclusion and population health approach to delivering ambulance services can improve health and reduce demand.

Conclusion

The importance of reducing waiting times has come to the fore given rising demand and the unprecedented operational pressure facing the NHS following the Covid-19 pandemic. This was particularly evident over winter with long waits for ambulance callouts, handover delays, waits in A&E and delayed discharge, but we know waiting times and care backlogs must also be addressed for community and mental health services.

As new systems and collaborative networks continue to mature, trusts clearly have a core role to play in improving patient flow and access to care as well as health outcomes for the communities they serve.

These case studies show what can be achieved in the most challenging circumstances. We have seen how effective leadership, data insights, digital solutions, partnership working and an outcomes focus have delivered results. However, these case studies also underline the importance of action from government to improve workforce planning and address chronic workforce shortages, to open the debate about funding pressures and to respond to the need for capital investment to update the NHS estate and insufficient capacity.

While trusts can, and will, continue to innovate and deliver high-quality effective services, the public deserve and expect more timely support. Investment is needed across the country to ensure improvements are embedded and valuable lessons learned, in the vital work to ensure patients can access the services they need in a timely manner and in the right setting.

Infographic sources

21% – growth in potentially avoidable admissions between 2011 and 2020	Nuffield Trust analysis of HES data https://www.nuffieldtrust.org.uk/resource/potentially-preventable-emergency-hospital-admissions
1.3 million calls – received by ambulance trusts in December 2022	NHS England https://www.england.nhs.uk/statistics/statistical-work-areas/ambulance-quality-indicators/ambulance-quality-indicators-data-2022-23
90 minutes – average category two response time in December 2022	NHS England https://www.england.nhs.uk/statistics/statistical-work-areas/ambulance-quality-indicators/ambulance-quality-indicators-data-2022-23
170,000 hours – lost to ambulance handover delays in December 2022	NHS England https://www.england.nhs.uk/statistics/statistical-work-areas/uec-sitrep/urgent-and-emergency-care-daily-situation-reports-2022-23
Double – the number of young people with a mental health condition between 2017 and 2022	NAO https://www.nao.org.uk/reports/progress-in-improving-mental-health-services-in-england
50% – increase in people waiting for diagnostic tests over the last decade	NHS England https://www.england.nhs.uk/statistics/statistical-work-areas/diagnostics-waiting-times-and-activity/monthly-diagnostics-waiting-times-and-activity/monthly-diagnostics-data-2022-23
16% – increase in people using NHS mental health services from 2020/21 to 2021/22	NHS Digital https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-bulletin/2021-22-annual-report
2.3 million – peak A&E attendances in December 2022	NHS England https://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity
850,000 – waiting for community care in December 2022	NHS England https://www.england.nhs.uk/statistics/statistical-work-areas/community-health-services-waiting-lists
94% – average general and acute bed occupancy winter 2022/23	NHS England https://www.england.nhs.uk/statistics/statistical-work-areas/uec-sitrep/urgent-and-emergency-care-daily-situation-reports-2022-23
13,000 people – experiencing a delayed discharge per day over winter 2022/23	NHS England https://www.england.nhs.uk/statistics/statistical-work-areas/uec-sitrep/urgent-and-emergency-care-daily-situation-reports-2022-23
24% – increase in people spending more than 21 days in hospital in winter 2022/23 compared to previous year	NHS England https://www.england.nhs.uk/statistics/statistical-work-areas/uec-sitrep/urgent-and-emergency-care-daily-situation-reports-2022-23
2 million – requests for social care in 2021/22	NHS Digital https://digital.nhs.uk/data-and-information/publications/statistical/adult-social-care-activity-and-finance-report



Suggested citation

NHS Providers (May 2023),
Providers Deliver: Patient Flow.

Interactive version

This report is also available in a digitally interactive format at:
www.nhsproviders.org/providers-deliver-patient-flow



NHS Providers is the membership organisation for the NHS hospital, mental health, community and ambulance services that treat patients and service users in the NHS. We help those NHS foundation trusts and trusts to deliver high-quality, patient-focused care by enabling them to learn from each other, acting as their public voice and helping shape the system in which they operate.

NHS Providers has all trusts in England in voluntary membership, collectively accounting for £104bn of annual expenditure and employing 1.4 million staff.



157-197 Buckingham Palace Road
London SW1W 9SP

020 3973 5999

enquiries@nhsproviders.org

www.nhsproviders.org

[@NHSProviders](https://twitter.com/NHSProviders)

© Foundation Trust Network 2023

NHS Providers is the operating name of the Foundation Trust Network

Registered charity 1140900

Registered in England & Wales as company 7525114

Registered Office

157-197 Buckingham Palace Road, London SW1W 9SP