ALLOCATE

Total workforce **visibility**
Inspiring stories from the NHS

Contents

Introduction

For NHS trusts to understand how best to deploy and manage their most important asset – their people – it is critical for them to have total visibility of the workforce. This has become increasingly urgent given the rising demand for care and shortage of doctors and nurses.

Having this transparent view of the workforce, generated by granula data, enables strategic and operational decision making to improve clinical outcomes, patient safety and staff productivity.

Visibility can be facilitated in different ways – how different trusts approach this depends on the context in which they are working and their individual workforce strategy. Trusts are using workforce visibility to identify and manage local challenges with increasing effectiveness but there is further to go – no trust in the NHS has achieved total workforce visibility across all staff groups.

The case studies within explore how a variety of NHS trusts have approached developing visibility of their workforce – with both their people and by using technology. Each trust has a unique perspective and focus, these stories demonstrate how they are using visibility to drive improvement in care and the working life of their nursing and clinical staff.

○ Consultant job planning and junior doctor rotas
○ Real-time deployment of nursing and midwifery staff
○ Using workforce intelligence to deploy staff
○ Self-rostering in nursing and midwifery
○ Patient need alignment with district nursing resource

We hope these stories from across the NHS inspire workforce leaders to identify areas of improvement and consider the benefits they are yet to realise within their trusts.

Workforce optimisation

Workforce optimisation is delivered by using technology to support the deployment of the health workforce. This is done in a way which reflects and supports better care of patients, efficient and effective use of different staff groups and use of data to create continual improvement.

From the basic starting point of linking payroll with time and attendance, planning and measuring rosters in advance, to pooling temporary staff across organisations, there are multiple opportunities where technology can help.

In March this year, the independent Workforce Deployment Expert Group launched the Workforce Optimisation Opportunity Map to define what 'good' looks like regarding the breadth and depth of the technology currently used. This map has for the first time provided a picture of how workforce optimisation technology is being utilised in the UK.
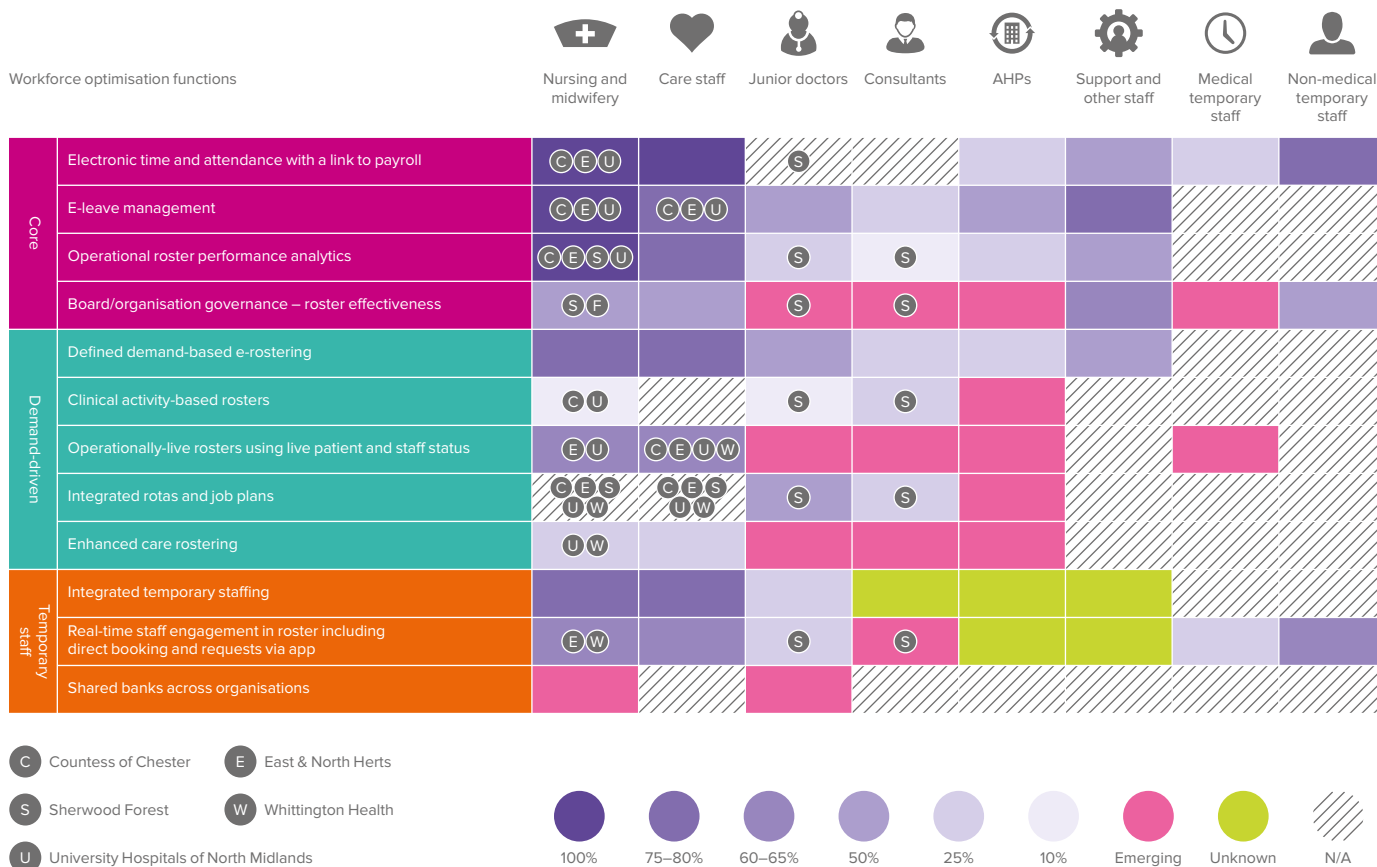
At the NHS Providers conference in November 2017, Secretary of State for Health Jeremy Hunt announced that NHS Improvement believes there is a £1.4 billion efficiency saving per year by 2020/21 to be made if all trusts follow best practice in e-rostering and job planning.

The map is a visual representation of the complexity of workforce optimisation functions across the different healthcare staff groups in the NHS. It considers the current position of NHS organisations in England in relation to the opportunities and benefits yet to be realised.

Each case study within this brochure covers a different element of the map, as identified below.

The map is populated with data from Allocate Software, based on customer knowledge and market research including Freedom of Information requests. It represents usage within organisations, although it is noted some organisations may have a percentage of use in some services and divisions while not all.

Workforce optimisation opportunity map

Workforce optimisation functions		Nursing and midwifery	Care staff	Junior doctors	Consultants	AHPs	Support and other staff	Medical temporary staff	Non-medical temporary staff
Core	Electronic time and attendance with a link to payroll	C E U		S					
	E-leave management	C E U	C E U						
	Operational roster performance analytics	C E S U		S	S				
	Board/organisation governance – roster effectiveness	S F		S	S				
Demand-driven	Defined demand-based e-rostering								
	Clinical activity-based rosters	C U		S	S				
	Operationally-live rosters using live patient and staff status	E U	C E U W						
	Integrated rotas and job plans	C E S U W	C E S U W	S	S				
	Enhanced care rostering	U W							
Temporary staff	Integrated temporary staffing								
	Real-time staff engagement in roster including direct booking and requests via app	E W		S	S				
	Shared banks across organisations								

C Countess of Chester   E East & North Herts

S Sherwood Forest   W Whittington Health

U University Hospitals of North Midlands

100%   75–80%   60–65%   50%   25%   10%   Emerging   Unknown   N/A

Sherwood Forest
Medical workforce visibility

Reduced agency spending

30%
May 2017

↓

17.1%
May 2018

For several years Sherwood Forest Hospitals NHS Foundation Trust has wanted to improve the visibility of the medical workforce issues, specifically to understand productivity, agency spending and annual leave management in greater detail.

In order to achieve this the trust knew they needed to implement a standardised job planning process linked to workforce activity. As Dr Andy Haynes, Executive Medical Director, explains: "We were working from paper-based systems which were not co-ordinated."

They started by implementing a paper-based method, but recognised the best way to implement a change would be through a digital solution. Therefore, Dr Haynes with other trust workforce leaders developed a business case for Allocate Software eJobPlan and ActivityManager, which was approved by the Trust Board.

Dr Haynes says: "eJobPlan was a huge enabler in the effective roll-out of standardised, fair and visible job plans for our consultants."

Job planning has been effectively embedded across the medical workforce, with 98% of consultants signing off job plans linked to annual activity.

Allocate Software's solutions have given us visibility of medical workforce issues in a way that wasn't possible with a paper-based system.

Dr Andy Haynes
Executive
Medical Director

The creation of these job plans connected to workforce activity data has successfully increased visibility within the trust. As Dale Travis, Divisional Manager of General Medicine, explains: "The software has given us a daily view of every doctor in work at a service, ward and divisional level while providing much more accessible data and intelligent reporting.

"For example, heads of service are able to see junior doctors' activity through one rota, even if they move across services.

"As well as identifying where doctors are in the hospital, we can see which doctors are not in but are available if needed and those unavailable due to study leave."

To ensure this transformation in transparency is sustainable and facilitates continuous improvement, the trust have established a board-to-ward review process. Including the development of:

○ A one-page summary for Dr Haynes to review productivity and annual leave
○ A fortnightly financial review of agency and substantive staff costs
○ An independent panel to review team job plans
○ An annual clinical process and activity evaluation

The trust is also rolling out voluntary monthly meetings with the consultants, to improve engagement, share ownership and ensure activity is being delivered to plan.

Dr Haynes says: "Through ActivityManager and monthly reports we can track delivery of job plans and annual leave. We can interrogate anything that looks unusual and take appropriate action where necessary"

This has led to the trust being able to better plan their services around the patient, while make workforce savings. The data also enables the service leaders to open up different dialogues with the workforce that they have not been able to have before.

Therefore, the trust was able to identify other service opportunities. For example, they introduced hot week working, reduced the use of agency staff to cover unexpected demand, reduced waiting list initiatives and increased theatre productivity.

Through service redesign the trust has seen a reduction in agency spending from 30% (of the total workforce spend) in May 2017, to 17.1% in May 2018.

Dr Haynes concludes: "Allocate Software's solutions ave given us visibility of medical workforce issues in a way that wasn't possible with a paper-based system. The granular data allowed us to redesign services and deploy our workforce to better meet the needs of our patients. In turn, this improved efficiency and played a key role in allowing us to achieve a £6 million saving on agency spend."

Countess of Chester
Real-time view of the workforce and patient acuity

↓

Reduced nursing agency spend by **41%**

↓

Reduced overtime spend by **9%**

+

Released approximately **4 hours** per week of ward managers' time from administration

During the Summer of 2016, Countess of Chester Hospital NHS Foundation Trust implemented BankStaff and HealthRoster to electronically manage their bank staff processes and roster the nursing and midwifery workforce.

Since then the Trust has gone on to roll out Employee Online and SafeCare across wards and departments.

This has been jointly led by Sue Hodkinson, Director of People and Organisational Development, and Alison Kelly, Director of Nursing and Quality, which gives the project support from workforce planning and service needs perspectives. They and their teams continue to work closely together throughout the implementation journey.

Alison Kelly says: "This has been a cultural change as much as anything, which doesn't happen over night. We are encouraging our nurses and midwives to look at their role differently, with more of a focus on patient care hours rather than traditional shifts."

Sue Hodkinson explains: "This work has been part of a Trust-wide acuity based workforce project aimed at putting the patient first. We have been focused on ensuring the software makes our staff experience of rosters better and is in keeping with Countess values of being Safe, Kind and Effective."

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Sue Hodkinson
Director of People and Organisational Development

Safe

Through the effective combined use of SafeCare and HealthRoster, the Trust has transparency of the nursing and midwifery workforce that it did not have before. Sue says: "Previously a lot of our systems were paper-based and not joined up. We now have complete visibility around staff and patients."

This is a powerful tool for the Trust as they can view staff availability against patient acuity in real time.

Alison explains: "Acuity based live rostering means we have a real-time view of nurse staffing and are able to better support our teams to ensure the deployment of our workforce to aligned to our patient need.

"For this to happen we had to enage staff in understanding what the needs of our patients are and aligning our resource have that need."

Kind

The live data generated by these solutions being embedded within the Trust's workforce process has facilitated improvements in staff deployment. As Sue explains: "The data enables us to have open conversations with our nurses and midwives. Meaning we can do the right thing for them on a real time basis."

For example, before implementing Allocate Software staff would only receive two to three weeks notice of their shifts. Now most receive rosters six weeks in advance, which gives staff autonomy and control over their work life balance.

Effective

The Trust now have a view of the workforce from several perspectives: financial, operational and strategic. Therefore, they can identify discrepancies in their workforce planning and take action to most effectively deploy staff.

Alison says: "We are more confident with the data and can make real time and strategic decisions based on our analysis of it. It is about making sure we have the right people doing the right job."

Through the acuity based workforce project the Trust has:

○ Reduced nursing agency spend by 41%
○ Reduced overtime spend by 9%
○ Released approximately four hours per week of ward managers time from the burden of administration

Interoperability

The Trust has incorporated the solutions within the central command centre allowing them to have visibility of operational flow, staffing and patient acuity in one place. This enables a consistent approach to decision making that was not possible before.

The future

Most nursing and midwifery staff are using the solutions now and so far the Trust has received positive feedback.

Julie Dixon, Ward Manager, says: "Now that it is up and running, I love it. Staff like that the rota is very clear, viewable far in advance.

"As a Manager it is already allowing me to see at a glance the patterns in staff requests and I can be more equitable in how I support the team."

However, the Trust is looking to evolve their use of the solutions to improve workforce deployment and help staff manage their lives better. For example, they are testing open rostering, looking at how to extend BankStaff across the region and identifying how the solutions can be used across other staff groups.

Alison says: "We are looking at our workforce and processes in a more radical way to plan care and teams for the future. We haven't cracked it yet, but we have the tools we need to do it."

University Hospitals of North Midlands

Intelligent workforce deployment

University Hospitals of North Midlands NHS Trust has used Allocate Software for several years. As the solutions have developed over time the Trust's use of them has become more sophisticated.

Liz Rix, Chief Nurse, explains: "At first we just used Allocate's e-rostering system, now we have other modules that give us the intelligence about our workforce which in turn enables us to meet the needs of patients.

"We have AllocateInsight reports which give us an in-depth view of staff deployment across the whole Trust."

Challenges

The Trust identified the need for better workforce data analysis and decision making as they faced several issues. Such as:

○ High vacancies due to rapid growth of the Trust
○ High temporary staff use
○ Difficulties recruiting new staff to some areas
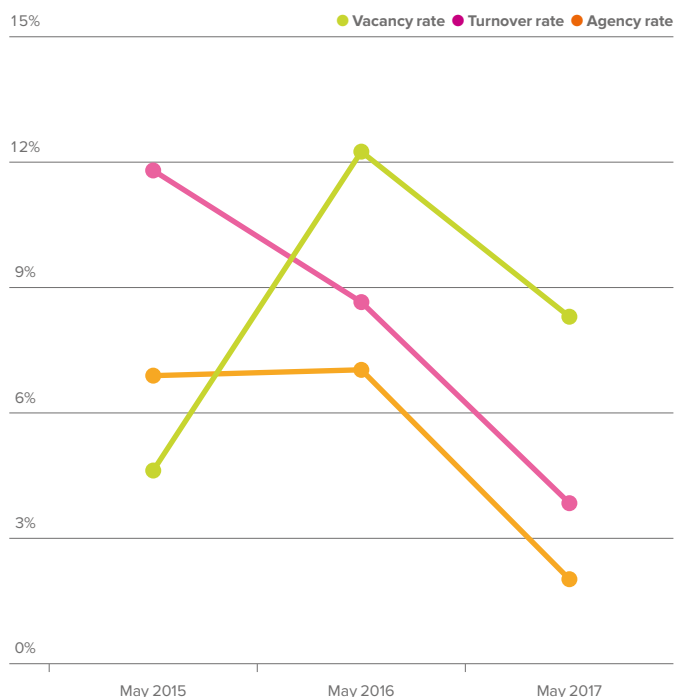○ A culture of focusing on staff numbers rather than need

We have Insight reports which give us an in-depth view of staff deployment across the whole Trust.

Liz Rix
Chief Nurse

Liz and colleagues set out to establish a more intelligent approach to planning rosters which would help them meet patient need, while removing peaks and troughs in staff availability. As Liz says: "It was important for us to understand how we were using the totality of the workforce and whether wards and areas were using resource most effectively.

"As we now say, it's about need not numbers. What do patients need and how can we best meet those needs."

"We still use our experience and professional judgement to make decisions, but we need to know what patients we are seeing and how best to care for them, which we can only do with the knowledge and information that AllocateInsight provides."

Intelligence

The Trust has implemented SafeCare, which the control centre team have access to, so they can make informed decisions in real time.

The data generated by the solutions also enables workforce leaders to have conversations with frontline staff about the use of resource and planning for the future. Liz gives an example of this: "We provided the stroke ward team with the data we had as we felt something needed to change. They took it upon themselves to redesign the service and reshape the workforce. They have developed a more dynamic and responsive stroke service for the Trust.

"This is what having the visibility of the workforce has done for us. We are able to prod and poke the data in ways we weren't able to before."

Outcomes

Through greater control, efficiency and accuracy of staff hours and annual leave management, facilitated by the solutions the Trust has embedded, they have seen a staff cost saving in excess of £250,000.

Staff cost saving in excess of

£250,000

The Trust has also seen significant improvements in staff vacancy rates, staff turnover rates and staff agency rates.

Liz says: "The rapid growth of our trust meant we couldn't keep up with the recruitment need, so we had to think about why people would come to work with us and stay. We knew it was important to feel valued, safe and invested in.

"We addressed this through several initiatives and our vacancy rate has reduced from 12% in 2016, to 7% on average."

"Allocate's systems gave us the insight to make these changes"

The Trust also developed a retention strategy to provide staff with career progression and wellbeing support in an effort to encourage staff to commit their future to the Trust. Liz says: "Allocate's systems gave us the insight to make these changes. We used to have 80 theatre staff gaps and now have none."

Liz concludes: "Allocate has been a good partner for us and we have changed the way we are able to deploy staff and deliver care to patients."

East and North Hertfordshire
Changing rostering culture

East and North Hertfordshire NHS Trust undertook a flexible working project in an effort to empower frontline staff to take ownership of e-rostering, as the trust believed this would lead to more effective workforce deployment, improved staff work-life balance, and increased productivity.

The trust decided to make several changes to its rostering processes during the project, which included:

○ Enabling and encouraging staff to access rosters online via EmployeeOnline
○ Opening rosters to allow 100% of contracted hours to be requested (often referred to as self-rostering)
○ Running educational workshops on how to make the most out of requests – not just requesting days off, but more positively requesting shifts they can work
○ Promoting shared governance and self-ownership of rosters
○ Creating fixed working patterns when this worked for the service and individual

> Giving staff the opportunity to self-roster has helped promote flexibility which has been linked to a better work life balance.
>
> **Rupert Clarke**
> Clinical Workforce Systems Lead

The trust saw great results from the changes implemented as part of a wider workforce optimisation piece the trust was undertaking. For example, in the medicine division:

○ Online rostering login requests increased by an average of 13% and up to 48% for some areas, meaning 60% of shifts are being self-rostered
○ Roster approval lead time improved by over 20 days
○ Temporary staffing usage reduced by 14%
○ Agency usage reduced by 12%
○ Sickness decreased by 3%
○ Care hours per patient day for substantive staff increased, which meant there was a reduction in the need for temporary staff, without compromising patient care

Prior to this project, most conversations about rostering happened at a strategic level, because of the need to control approval lead-time and look at annual leave management. But by engaging matrons and ward managers, where most of the interaction about staffing occurs, the trust was able to get frontline staff to own rostering. This has introduced a shared governance approach to the way the trust rosters. To support this change, roster approval is possible at eight weeks and staff can now request all of contracted hours, resulting in an increase in EmployeeOnline usage.

Online rostering login requests increased by up to **48%**

Temporary staffing usage reduced by **14%**

Sickness decreased by **3%**

Rupert Clarke, Clinical Workforce Systems Lead, explains: "Using the EmployeeOnline application has really helped us promote shared governance across the organisation, now rostering is something that is done with staff not too staff.

"Giving staff the opportunity to self-roster has helped promote flexibility which has been linked to a better work life balance. We also found that self-rostering decreased the changes in rosters after roster approval as staff did not need to change or swap shifts."

"The app is a real game changer in terms of how organisations communicate and engage with their workforce"

Changing the rostering process also brought about culture change, which has helped create an environment for sustained organisational learning in relation to rostering. An independent audit of the service noted the collegiate nature of staffing meetings.

Shifts being self-rostered

60%

Rupert concludes: "The app is a real game changer in terms of how organisations communicate and engage with their workforce, using technology as a social engagement tool helps teams grow a culture of togetherness that supports team retention and resilience which ultimately leads to improved team performance.

"The clear and transparent communication helps teams take a balanced and fair approach to having adult conversations about service need, particularly around to requesting and approving annual leave. The app helps managers and staff to understand each other's needs."

Whittington Health
Live community allocation

Whittington Health NHS Trust had been looking to improve the efficiency of their district nursing service, to increase productivity, deliver better care and reduce staff spending.

Time saved by reviewing and checking staff allocation on the move

The Trust introduced the use of tablets across their district nursing service in order to reduce time spent going into the office every morning for handover, pick up their daily lists and to check emails between patient visits.

As Sita Chitambo, Head of Nursing, explains: "We were looking for a system that would contribute to patient safety, efficient and ultimately increase productivity."

The Trust introduced eCommunity to align patient need with available resources in real time.

Sita says: "As the service had already been using iPads, it made the implementation of eCommunity smooth and staff could see that it would free more time that could be dedicated to patient care."

The service has seen a reduction in the time it takes to allocate patients. Sita says: "At the end of a day, everybody goes home knowing which patients they will be seeing the next day.

"We can see our daily capacity, as eCommunity RAG (red, amber, green) rates according to priority 1s, priority 2s, priority 3s. This allows prioritisation of patients based on need and nursing skills leading to improved continuity of care."

The system is very responsive and means that planned patient visits can be changed live to fit around the patient.

Sita Chitambo
Head of Nursing

In 2016/17 the Trust estimated the system saved

£310,540

6.45 staff released from administration and co-ordination duties for direct patient care

eCommunity allows improved visibility of nursing location to enable prompt access, efficient reallocation and better productivity.

Sita explains: "The team coordinator can see in real time each staff member's progress with their visits and if a member of staff is running late with their visits, the team coordinator can request assistance from other members of staff.

"The system is very responsive and means that planned patient visits can be changed live to fit around the patient. This gives patients greater transparency and confidence in their care."

As well as this, the Trust estimated the system saved £310,540 in 2016/17 by releasing 6.45 staff from administration and co-ordination duties for direct patient care.

Summary

The NHS is a world leader in the use of workforce optimisation technology and workforce visibility.

The case studies within were selected to demonstrate the impact total visibility of the workforce has on the real-time, operational and strategic deployment of different staff groups across several environments and different staff groups – from district nurses to hospital-based medics.

They also show how workforce visibility is being used to meet the specific needs of NHS trusts. From establishing activity-based job plans for consultants to live staff deployment aligned with patient acuity.

Trusts across England have unique as well as common challenges in regards to maximising the potential of their workforce in terms of efficiency, patient care and improvement of the work environment for the staff themselves.

The Workforce Optimisation Opportunity Map allows trusts to have a view on where they sit in relation to the whole of the NHS in terms of staff groups as well as focus areas.

The Workforce Deployment Expert Group hope that the map will help NHS organisations to:

○ See and plan the potential for further development of their workforce optimisation
○ Seek advice and support from organisaitons who are already undertaking work in the areas or with staff groups that they are interested in
○ Assist trusts in communicating internally about their own successes as well as challenges for the future

More information

To find out more about any of the topics discussed in this report, please email **marketing@allocatesoftware.com**