

# Connected Health Cities

## End of Project Report: Industry Engagement

NWC Connected Health Ecosystem event –  
innovating to meet NHS and social care  
workforce challenges

---

# CONTENTS

- ABSTRACT
- INTRODUCTION
- METHOD
- RESULTS
- INSIGHTS
- CONCLUSION
- AUTHOR/MAIN CONTACT

## ABSTRACT

The NHS and social care system is facing its biggest ever challenge - **workforce**.

Across NHS trusts there is a shortage of more than 100,000 staff. With no growth in sight to the supply of workforce over the next 10 years, the gap between the growing demand for health services and system capacity is widening.

Based on current trends, it is projected that the gap between staff needed and the number available could reach almost 250,000 by 2030.

As part of Connected Health Cities' commitment to engaging with industry and developing workforce, the Innovation Agency, the Academic Health Science Network for the North West Coast, hosted an event on how digital innovation can support workforce strategies to improve healthcare and generate economic benefits for the region.

This Ecosystem event focused on the vast array of digital solutions and technology that promise to change the way we deliver care and manage workforce logistics, to help close the workforce gap.



## INTRODUCTION

The workforce challenges in the NHS in England now present a greater threat to health services than the funding challenges.

The NHS Long Term Plan identifies a workforce gap of 100,000 people, and while efforts are underway to increase training places to close the gap, the supply of NHS and care staff remains a threat to future delivery.

In addition, if the emerging trend of staff leaving the workforce early continues and the pipeline of newly trained staff and international recruits does not rise sufficiently, this number could be more than 350,000 by 2030.

The current shortages are due to a number of factors, including the fragmentation of responsibility for workforce issues at a national level:

- Poor workforce planning
- Cuts in funding for training places
- Restrictive immigration policies exacerbated by Brexit
- Worryingly high numbers of doctors and nurses leaving their jobs early
- Reductions in central investment in education and training (5% of health spending in 2006/7 to 3% in 2018/19)

The implications of this on the NHS are that, unless continuing staff shortages are addressed, waiting lists are likely to grow, care quality will deteriorate and there is a risk that some of the extra £20.5bn secured for NHS front-line services could go unspent as health care providers may not have the staff to deliver additional activity.

NHS leaders have recently published a long-term plan setting out their ambitions for the health service in the context of the recent funding settlement. The plan sets out a strategy to address the workforce crisis to develop a credible path to a sustainable future for the health service. New NHS roles and careers will be shaped to reflect the future needs and priorities set out in the rest of the Plan and there is acknowledgement of the need to ensure the NHS has the necessary primary care and generalist skills, to complement what has been a major move to more specialised hospital-based care.

## METHOD

---

***“Workforce is one of the biggest challenges facing the health service today, but there are some brilliant ideas out there that could help – here are some of them.” – Dr Liz Mear, Chief Executive, Innovation Agency***

---

As delivery partner for Connected Health Cities in the North West Coast, the Innovation Agency played a part in helping to address workforce shortage concerns by hosting a Connected Health Ecosystem event focused on innovating to meet NHS and social care workforce challenges.

The North West Coast Connected Health Ecosystem is a regular event hosted by the Innovation Agency which brings together partners from health and social care, industry, academia and patient organisations. *(See Appendix 1 for details of previous Ecosystem events).*

The ECO events focus on improving health across the North West Coast at the same time as generating economic benefits for the region, partly through the uptake and deployment of digital health solutions.

As part of Connected health Cities’ programme of industry engagement and workforce development, the Innovation Agency decided to focus on innovating to meet NHS and social care workforce challenges as the theme for its 18<sup>th</sup> Connected Ecosystem event (ECO 18).

The Innovation Agency designed a half-day event to explore solutions to workforce challenges in health and social care and provide opportunities to discuss the latest thinking, share best practice and discover innovations, in particular, digital technology for improving workforce productivity.

ECO 18 was held on 27<sup>th</sup> March 2019 at Haydock Park Racecourse in Newton-le-Willows which was deemed to be a perfect location in terms of function space and hospitality, as well as being central and accessible for all in the North West.



Healthcare staff, patients, businesses and academics were invited to attend, as well as workforce leaders, commissioners and social care leaders.

Delivered in partnership with ECH Alliance, the event allowed delegates to hear from a variety of carefully selected esteemed NHS and industry speakers.

The event also provided a chance to learn about digital innovations with a showcase of new technology, systems and apps which are transforming the way care is delivered, as well as the chance to discuss adoption with the innovators and hear how those innovations could be put into practice.



# RESULTS



A total of 228 people signed up to attend ECO 18 – from workforce and social service leaders, commissioners and healthcare professionals from acute, community, social and primary care settings, to academics carrying out research, SMEs displaying their products and voluntary and community organisations. Of those who attended, 44% worked for the NHS, with 45% from the commercial sector, 8% from academia and 3% from local authorities.

The agenda included:

## ECO 18: How digital innovation can support workforce strategies

### AGENDA

#### **09:00 Registration, marketplace and networking**

#### **09:30 Welcome and introduction**

Dr Liz Mear, Chief Executive, Innovation Agency

#### **09:40 ECHAlliance update**

Andy Bleaden, International Projects Manager, ECHAlliance

#### **09:50 The patient journey - the one I had, the one I would want**

Jen Gilroy-Cheetham, Patient Experience Speaker

#### **10:00 Workforce: context setting, importance for the system, need to think differently**

Karen Howell, Chief Executive, Wirral Community NHS Foundation Trust

#### **10:20 Disruptive thinking about the future of our workforce**

Dr Wilson Wong, Head of Insight and Futures, CIPD

#### **Optimising and efficiency**

#### **10:40 Creating a hospital coordination centre to improve patient flow**

Ian Bett, Director of Planning and Partnerships, Countess of Chester Hospital NHS FT

#### **Wellbeing and retention**

#### **11:30 Aligning capability to need - a tale of a spider and some triangles**

David Harris, Director of People & Organisational Development, Cheshire & Wirral Partnership

#### **11:45 Killing digital - making technology less intimidating**

Ian MacIntyre, Head of Digital, NHS Leadership Academy



## Planning and tools

### 12:00 New developments and innovations in education

Dr Karen Stansfield, Associate Dean of Enterprise, University of Salford

### 12:15 WRaPT and innovative workforce redesign

Colin Lewry, WRaPT Director

Fiona Lord, WRaPT Manager, Lancashire Care NHS Foundation Trust

### 12:30 Showcasing innovations

The event began with refreshments, networking and a chance to browse the 'marketplace' exhibitors displaying and demonstrating their innovations, such as:





## EXHIBITORS

Company	Details	Web
CIPD	The professional body for HR and people development	<a href="https://www.cipd.co.uk/">https://www.cipd.co.uk/</a>
Dignio	Remote Care Open software Platform	<a href="https://dignio.com/en/">https://dignio.com/en/</a>
Doc Abode	Matching clinician availability to patient needs in real-time	<a href="http://www.DocAbode.com">www.DocAbode.com</a>
Driver Net	Smart mobility platforms for every journey	<a href="http://www.driver-net.com">www.driver-net.com</a>
Elemental Software	Digital social prescribing Solutions	<a href="http://www.elementalsoftware.co">www.elementalsoftware.co</a>
Fastroi	Efficient Care Management Systems	<a href="http://www.fastroi.co.uk">www.fastroi.co.uk</a>
Healthcare Communications	Appointment Management & Patient Experience Surveys	<a href="https://www.healthcare-communications.com/">https://www.healthcare-communications.com/</a>
Hospify	Trusted healthcare messaging for everyone	<a href="http://www.hospify.com">www.hospify.com</a>
IEG4	Digital transformation for continuing healthcare assessments	<a href="http://www.ieg4.com">www.ieg4.com</a>
Lantum	Find and manage locum and salaried work and keep on top of payments	<a href="http://www.lantum.com">www.lantum.com</a>
Radar Software	Quality, compliance and regulatory processes software	<a href="http://www.radarsoftware.co.uk">www.radarsoftware.co.uk</a>
Wrapt	Health and care workforce transformation	<a href="https://wrapt.org.uk">https://wrapt.org.uk</a>

## SPEAKERS



Dr Liz Mear, Chief Executive of the Innovation Agency, opened and welcomed delegates to the event by setting the scene. She said:

“Workforce is one of the biggest challenges facing the health service today, but there are some brilliant ideas out there that could help – here are some of them.”

The first set of speakers emphasised how digital innovation can support workforce strategies.

Andy Bleaden, International Projects Manager for the European Connected Health Alliance who explained how the not-for-profit members’ organisation aims to bring stakeholders together - from procurers to suppliers – to break down silos in the digital health sector.

Jen Gilroy-Cheetham who shared her experience of hospital care which left her feeling unsafe and made a plea to healthcare staff to work together as a team and do things differently.

Karen Partington, Chief Executive of Lancashire Teaching Hospitals NHS Foundation Trust, highlighted the need to exploit new technology and accommodate the needs of various age groups in planning to fill workforce gaps.

Wilson Wong, Head of Insight and Futures at the Chartered Institute of Personnel and Development (CPD) talked about disruptive thinking around the future of our workforce and questioned how we can ensure sustainability in a new social contract between state, corporations and workers?



With the emphasis shifting to optimisation and efficiency in workforce, Helen Birley, Clinical Lead for the Coordination Centre at Countess of Chester Hospital NHS Foundation Trust, told how a patient's 106-day stay in hospital prompted a review that led to the development of a coordination centre to improve patient flow. This 'air traffic control' system uses teletracking to allow managers to know where patients are at all times.

Moving on to the theme of wellbeing and retention, David Harris, Director of People and Organisational Development at Cheshire and Partnership NHS Foundation Trust spoke about aligning capability to need and the importance of acknowledging the complexity of our ever-changing health and care systems.

Ian MacIntyre, Head of Digital at the NHS Leadership Academy shed light on how we can make technological change less frightening by changing attitudes to technology and talking about opportunities, not threats.

On the subject of workforce planning, Dr Karen Stansfield, Associate Dean of Enterprise at the University of Salford, one of the UK's largest providers of health and social care graduates, discussed new developments and innovations in education.

She shared how, by working across disciplines and by collaborating with industry, the University aims to produce more empowered graduates with appropriate skills and so boost retention rates.

Colin Lewry and Fiona Lord from Lancashire Care NHS Foundation Trust illustrated how their secure online modelling tool is providing innovative workforce redesign solutions for the trust.

WRaPT stores data in such a way as to allow modelling for a number of complex future scenarios. And while the WraPT system isn't always the answer, the team behind it is the gateway to a number of solutions.

## BUSINESS PITCHES

Following the speakers, a number of SMEs specialising in digital workforce solutions presented their business pitches including:

Company	Details	Web
Aire Logic	Aire Logic is a healthcare IT company dedicated to improving the delivery of care, from the clinical staff experience to measurable patient outcomes.	<a href="http://www.airelogic.com">www.airelogic.com</a>
Idea Drop	Idea management software that helps you harness the collective intelligence of your employees to solve business challenges faster.	<a href="http://www.ideadrop.co">www.ideadrop.co</a>
Patchwork	Ramp-up your Staff Bank fill rates, increase patient safety and save huge amounts of money.	<a href="https://patchwork.health/">https://patchwork.health/</a>
Rescon Technologies	Rescon specialises in working with health and social care partners to produce digital solutions that are integrated into services.	<a href="http://www.rescontechnologies.com">www.rescontechnologies.com</a>
Zebra Staffing	Zebra brings together employers and healthcare professionals seeking temporary or additional work - simply and effectively.	

## WORKFORCE ROUNDTABLE EVENT

The Eco event concluded with a Workforce Roundtable event from 1.30pm – 3.30pm entitled **“Optimising clinical workforce productivity through innovative digital workforce deployment systems.”**

The aim of the roundtable event was to bring workforce leaders together to discuss the workforce challenges and explore potential solutions to optimising clinical workforce productivity through digital workforce deployment systems.

The Innovation Agency invited a small number of companies that have developed state-of-the-art digital technologies of modular architecture designed to support NHS organisations evolve their temporary staff management.

Attendees included:

- Christine Samosa, Strategic Workforce Lead. Health and Care Partnership for Cheshire and Merseyside
- Emma Ward , Strategic workforce Lead East Cheshire NHSFT
- Andy Howlett , NHSI Clinical Productivity Operations Director
- Lyndsay Hallworth , Innovation Lead , Lancashire Care NHSFT
- Andrew Pyrah and Mike Sealy from Lantum
- Prof Rao Vallabhaneni, Royal Liverpool NHSFT and Zebra Staff Management Systems

As well as presenting their solutions, each company was asked to outline how they would deliver their support to front line organisations, giving particular consideration to how they will:

- Authentically engage with provider trusts
- Gain a full understanding of user needs and aspirations
- Guarantee full implementation support - technology, functionality, maximised system use
- Provide support to deliver the levels of attainment and underpinning meaningful use standards
- Commit to ongoing, responsive customer care and support

- Guarantee an open interface for data exchange between their own and other suppliers' software
- Contribute to sharing learning from implementation



Colin Callow, Commercial Programme Manager at the Innovation Agency, who hosted the event, concluded: “This event brought North West workforce leaders together with innovative SMEs to discuss current challenges in temporary staff management and the limitation of current medical rostering and temporary staff solutions.

“Participants heard about the NHS national programme to support delivery of its ambitious target of reducing agency costs by a further 17% for 2018/19 and explored innovative ways to manage and grow their clinical banks to achieve this ambitious reduction target innovative ways to optimise clinical workforce productivity through innovative digital workforce deployment systems.

“Following the event, a number of evaluations of these innovative solutions have been set up across the NWC region deploying these state of the art digital technologies of modular architecture to support NHS organisations evolve their temporary staff management.”

## ATTENDEES

Job Title	Company
Director of MSK	HBSUK
Associate Director of HR	Mersey Care NHS Foundation Trust
Head of Digital	NHS Leadership Academy
Strategic Workforce/HR lead	Healthier Lancs and South Cumbria
Director of Clinical & Workforce Productivity	NHS Improvement
Workforce Technology Lead	East Cheshire NHS Trust
Strategic Workforce Lead	Health and Care Partnership for Cheshire and Merseyside
Director of People and OD	Cheshire and Wirral Partnership NHS FT
Acting Deputy Director of People and OD	Cheshire and Wirral Partnership NHS Foundation Trust
Principal Improvement Consultant	NHS Midlands & Lancashire CSU
Innovation Lead	Lancashire Care NHS Foundation Trust

# INSIGHTS



## **Dr Liz Mear, Chief Executive of the Innovation Agency**

*“Today has been about how we harness the talent of our workforce and how we enable them to adopt digital technologies and give them the capacity to do that by smart rostering and working with them to match their learning styles so they’re not afraid of digital ways of working, that they embrace it in their everyday practice.*”

*“What we’re seeing today is that if we give people the tools to do the job, if we give them the environment that they can do it in, if we train them in the right way and if we actually listen to their needs rather than forcing things upon them so we get the right digital solutions, then the future is really positive for our workforce using new technologies and innovating to support patients, service users and carers.”*

## **Wilson Wong, Head of Insight and Futures at the Chartered Institute of Personnel and Development**

*“If you listen to some of the speakers, all of them unanimously say there's going to be a global shortage of medical professionals going forward. Once you acknowledge that certain vacancies can never be filled, the solution then is to look at redesigning those jobs, augmented by technology and data to begin to plug some of those gaps.*”

*“Narrow some of those skills shortages by thinking again about what skills you require, what current workforce needs to be retained, upskilled and retrained so that they have certain strengths and where you can, bring in parallel workforce to begin to think about their roles in a different way.*”

*“If you are adopting technology thoughtfully and then disseminating it to your workforce so that they work in a different way, really there is no limit to that kind of opportunity but you have to be thoughtful and quite clear about your destination.”*

## **Karen Partington, Chief Executive of Lancashire Teaching Hospitals NHS Foundation Trust**

*“The incentives to work in the NHS are not the same as they were. We’re seeing a significant increase in the number of experienced mature staff leaving the organisation. If we’re going to recruit the new generation to come and work for the health service, we have to be more focused on digital technology. It’s how they live their lives today.*”



*"We can go online, speak to someone, have a diagnosis, and pick up medication from the chemist in 15 minutes - all from the comfort of your own home. I think that's the way we'll move in the future."*



**Helen Birley, Clinical Lead for the Coordination Centre at The Countess of Chester Hospital NHS Foundation Trust**

*"We identified the need to change how we were working across the hospital, focusing on how to make the patient journey better, how to improve patient flow, improve patient safety. It was about what options were open to us."*

*"And it was then really about getting the staff to understand and use the technology because we knew the potential benefits to the patients, but without the staff on board, we wouldn't realise any of those. So that was the biggest challenge I feel."*

*"We've had positive feedback certainly from some specialties that they're not having to walk around the wards now searching for their patients, they are generally tending to be within their own wards so they're getting the right care from the right medical staff."*

**Ian MacIntyre, Head of Digital at the NHS Leadership Academy**

*"When I came into the NHS, there were a few examples where we were putting solutions in place or solutions already in place where I just didn't understand why we were doing it, what the positive outcome was that we were expecting to see from that, it was more around just ticking a box."*

*"Part of the work we're doing on the Building a Digital Ready Workforce Initiative is that we've understood that there's no end of great technology out there. We spend huge amounts on getting the technology right and we spend virtually nothing on implementing it and enabling it properly."*

*"That, for me, is the key piece of work that needs to happen. We need to become proficient at change, at understanding the people impact of change, as much as bringing the enablement of technology in-house. So I think there's a great opportunity there just to explore a different way of operating."*

**Dr Karen Stansfield, Associate Dean of Enterprise at the University of Salford**

*"There's a whole range of activities going on already in healthcare trying to use digital technologies to enhance people's lives."*



*"We've got to help people make that change. I think we're very good in health and education in saying we're all change agents. But actually, human beings don't actually like change that much. For those who do, great it's exciting, but it's not the way everyone reacts."*

*"For me, it's about how does that match with my values and beliefs, so do I think that if I use that digital technology it will help that patient get better quicker? if I do think that, then the reality is I will do it. If I think it might be just about saving money or just another fad or another imposed system or I haven't got the right equipment, or I've got five different systems to work through so why don't I just write it down, I think that might prevent me."*

*"I think most practitioners if not all want to do the best for patients. So the technology should assist that and not be a barrier in itself. If we can overcome some of those systems issues, practitioners would be ready to absolutely embrace technology."*

**Colin Lewry, WraPT, Lancashire Care NHS Foundation Trust**

*"WRaPT is a combination of things, so it's an approach, a set of tools and a team. We've got a core approach that we use that brings all of those together into a way that you can move from not understanding anything about workforce planning to having a proper workforce plan at the other end of it."*

*"There is a huge amount of digital innovation that's out there, I think the key challenge that the NHS faces is how does it quickly identify and adopt the technology that's out there into its core processes."*

*"The second thing is trying to identify how the NHS can drive innovation in its own right and the difficulties associated with that."*

*"The NHS has got a huge amount of data, it's got some wonderful use cases, it knows what needs to happen and it's got some incredibly intelligent people working within it. How do we identify those opportunities, how do we pull together the solutions, those opportunities, and get that spread across the NHS?"*

**David Harris, Director of People and Organisational Development at Cheshire and Partnership NHS Foundation Trust**

*"The model is that it sort of moves from an external perspective to an internal perspective so focuses a lot on relationships built on trust and how you develop those relationships, through to knowledge, skills and behaviours which we call competence."*

*“What thoughts, emotions and physical aspects are going on for a person that leads to those behaviours? Then what is it, in terms of values and beliefs, that really drives those thoughts and feelings?”*

*“So that's a key element of it, and then I guess two other key components are the working environment, so accommodation, information and access to the right equipment which can constrain or enable capability, and then also the organisational design in terms of structure, job design and policy and process.”*

*“All of those things go together to what we would describe as a mixture of capacity and competence and confidence, which is the capability that you need at whatever level of a system to meet need.”*



## CONCLUSION

The Connected Health Ecosystem event was a successful event, in that, it brought together multi-stakeholders to connect, network and have meaningful conversations on how we can work together to tackle potential future workforce shortages in the health and social care system.

The events team at the Innovation Agency created a packed programme of high calibre speakers who provided enlightening presentations, sharing their thoughts, insights and experiences.

The main messages were that planning is essential to highlight workforce shortages and that there is an abundance of digital technology to help plug these gaps and attract the future generation. But this requires a huge change in culture and the challenge will not be a lack of digital solutions but rather, a shift in culture to help healthcare professionals embrace and adopt new ways of working for the benefit and safety of patients.

The exhibition of digital providers and innovations showed how digital innovation can support workforce strategies, and technology was showcased, to give healthcare commissioners and leaders solutions to their workforce planning and operational requirements.

Delegates attending the event received a takeaway Workforce Resource Optimisation pack containing links to all presentations, podcasts and videos in order to disseminate and share learning which will no doubt help to influence and address issues in workforce development.

## AUTHOR

Michelle Rushton, Communications Officer for Connected Health Cities,  
Innovation Agency – [michelle.rushton@innovationagencynwc.nhs.uk](mailto:michelle.rushton@innovationagencynwc.nhs.uk)

# APPENDIX 1



## **Ecosystem events from 2017 to 2019:**

March 2017 - Eco 11 – Medicines optimisation

June 2017 - Eco 12 – Mental Health

Sept 2017 - Eco 13 – Technology Enabled Care

Dec 2017 - Eco 14 – Patient safety

Feb 2018 - Eco 15 – Interoperability

Sept 2018 - Eco 16 – Digital Health in the North

Sept 2018 – Connected Health Cities: Using Learning Health Systems

Dec 2018 - Eco 17 – Transformation

March 2019 – Eco 18 – Workforce

July 2019 – Eco 19 – Point of Care

Sept 2019 – Eco 20 – Care homes

Dec 2019 – Eco 21 - Urgent and unplanned care in respiratory