

WELCOME TO

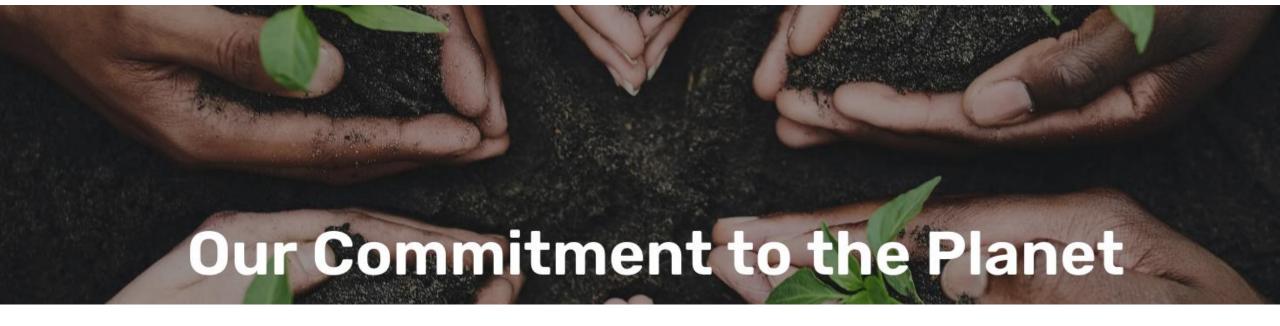
The NHS Estates & Facilities Conference 2023





Wednesday 1st March 2023 - 10:50am - 15:00pm - Hatfields Conference Centre, London



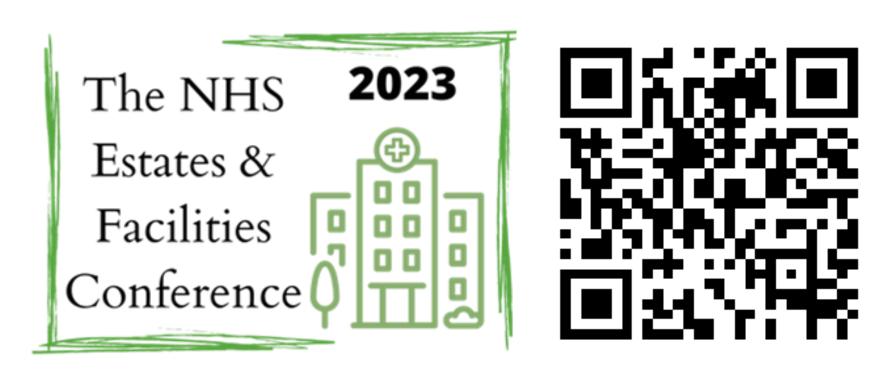


For Each Delegate Attending Our In-Person Event Today, we will be planting 1 tree with our Key Sustainability Partner





Please scan the QR Code on the screen. This will take you through to Slido, where you can interact with us.



Wednesday 1st March 2023 - 10:50am - 15:00pm - Hatfields Conference Centre, London Conference hosted by Convenzis Group Limited

Event Day Overview



Morning Networking: 10:40am - 11:40am Lunch & Networking: 13:15pm - 14:05pm Drinks Reception: 16:00pm - 15:00pm

The event is CDP accredited and your points will be sent within around 6 weeks of the event date.



The NHS Estates & Facilities Conference 2023



Event Chair – Opening Address



Nicola Theron

Director of Estates

North Central London Integrated

Care System



The NHS Estates & Facilities Conference 2023



SPEAKING NOW



Nicola Theron

Director of Estates
North Central London Integrated Care System

I will be discussing...

"Collaboration & Partnership within the ICS & with the private sector - A CDC case study at Wood Green Shopping Centre"





Wood Green Community Diagnostic Centre

Doing things differently to support Collaboration and Partnership

Nicola Theron, Director of Estates NCL ICS







Working in partnership differently



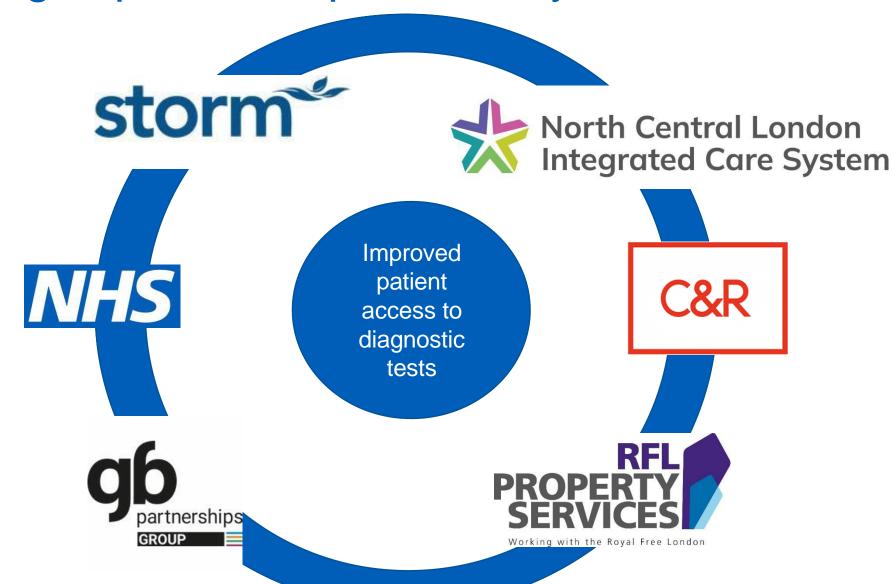
Using spaces and building differently



Delivering services differently

Improved patient access to diagnostic tests

Working in partnership differently



Using space and building differently



- Two shop spaces converted into a diagnostic facility in the middle of a community shopping centre
- Project delivered on time and on budget
- First patient through the door, eight months after works started on site









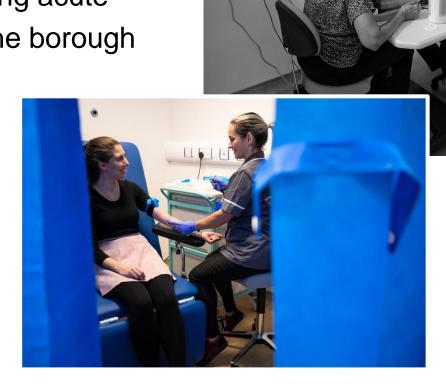
Delivering NHS services differently

First dedicated diagnostic facility in the borough

Over 7000 people seen since August 22 opening

 The CDC is closer than the neighbouring acute sites for 30 out of 40 GP practices in the borough

 Tests done earlier, quicker and results delivered faster





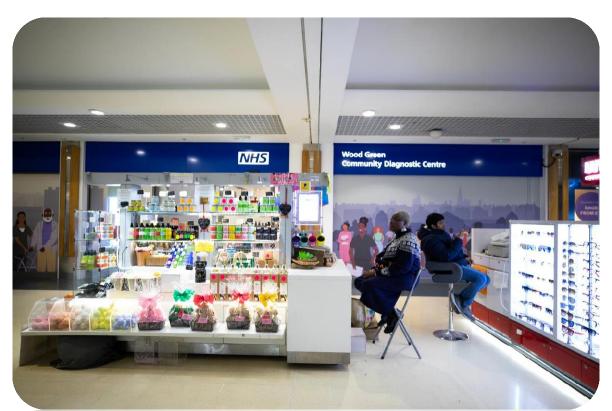








Thank you for listening















The NHS Estates & Facilities Conference 2023



SPEAKING NOW



Dr Gemma Jerome FLI

Director

Building of Nature

I will be discussing...

"How green infrastructure can deliver NHS strategic priorities for sustainability and patient-centred design"



NHS Estate and Facilities Conference 2023

info@buildingwithnature.org.uk

Dr Gemma Jerome, Building with Nature Director



How can NHS Estates utilise green infrastructure to deliver on Sustainability, Net Zero & patient-centred design?

Green
infrastructure =
Nature as design

High-quality green infrastructure can help to define **sustainable spaces**

to secure **longevity** of wellbeing for **humans** (and more than humans)

in an **age** characterised by **uncertainty**

Green infrastructure = critical infrastructure

Green infrastructure (GI) is a network of multi-functional green features, integrated into the built-environment, that enhance biodiversity, provide connectivity, support climate resilience, promote better public health and increase community wellbeing.

GI is not simply an alternative description for conventional green and open space, high-quality GI stacks and optimises multiple key functions, which in turn support a range of benefits including protecting and enhancing natural habitats, delivering environmental gains, creating inclusive and accessible places, integrating nature-based water management solutions and contributing to place distinctiveness.



Green infrastructure components

GI components include green features: parks, open spaces, allotments, private gardens, street trees, woodlands, ecological habitat, soils, and integral built-environment features such as green roofs and walls, bee bricks, bird and bat boxes, soils, and blue features such as rivers, streams, ponds and Sustainable Drainage Systems (SuDS) e.g. swales, raingardens and permeable paving.























Drivers for change – Government legislation

Climate emergency + Ecological emergency are two sides of the same coin:

GI supports resilience to extreme heat, offers shading and cooling for improved safety, health & wellbeing of communities.

GI optimises resilience to climate-related flooding & drought.

Habitat creation helps with climate response (adaptation and mitigation) e.g. green roofs and green walls help to regulate temperatures, address UHEI, and introduce a network of wildlife havens through towns and cities.

Environment Act (Defra) + Levelling Up & Regeneration Bill (DLUHC) both ask developers to address nature recovery, climate change, and access to nature:

Biodiversity Net Gain MORE/BIGGER/BETTER

Nature Recovery Networks & Local Nature Recovery Strategies **MORE CONNECTED**

Nature on your doorstep CLOSE TO PEOPLE



Drivers for change – Carbon/Net Zero by 2050

GI can help you to positively responding to the climate emergency in 3 key steps:

- mitigation (reducing carbon) e.g. urban cooling, sequestration.
- adaptation (responding to carbon) e.g. SuDS for flood resilience.
- climate + nature positive behaviours e.g. safe, green, convenient active travel routes for walking / cycling / scooting etc.

Conclusion: Explore and exploit synergies between approaches that deliver climate-positive and nature-positive development simultaneously



Drivers for change – patient-centred design

GI can help you to positively responding to patientcentred design in 3 key steps:

- Accessible and high-quality greenspace for everyone to enjoy (patients + visitors + staff).
- Identify and reduce health + social inequalities at neighbourhood level; role of NHS in community.
- Address wider determinants of health at subregional level by addressing the links between built and natural environment (e.g. active travel routes to facilities, recognising role of air pollution in childhood asthma, mental health).

Conclusion: Focus on outcomes for people



Drivers for change — ESG/green finance

Good governance – delivering NHS 'triple aim'

Transparent impact on society and the environment

Valuing Nature Services and Prioritising Nature-based Solutions

e.g. carbon storage from healthy forests, grasslands, wetlands can be greater than managed equivalents owing to greater soil depth, age & structural diversity; identify assets across your estates.

e.g. creating new features, such as pocket parks or green roofs, which are well-located and well-managed can contribute to urban cooling, storm-water management, and bring mental + physical health benefits even when features are small-scale.

Conclusion:

Protecting + restoring valuable existing features can cost less and save more carbon. Even small-scale interventions matter.



Making nature-friendly estates a reality

Accessible

Inclusive

Enjoyable





Preventative and restorative

The BwN Standards Framework 2.0

12 quality Standards providing a definition of high-quality green infrastructure

CORE

WELLBEING

WATER

WILDLIFE









Our Standards Board

The Building with Nature framework is overseen by our Standards Board, comprised of key professional bodies, leading experts in green infrastructure and representatives from industry and government across the UK.







Welsh Government



















Building with Nature Awards

We offer Awards at both pre- and post-construction stages, to highlight what good looks like at each stage of the green infrastructure lifecycle.

Schemes which are signed off post-completion, will be invited to apply for a Building with Nature National Award.



We also accredit policy documents to confirm local authorities have clearly defined their requirements for high-quality green infrastructure.







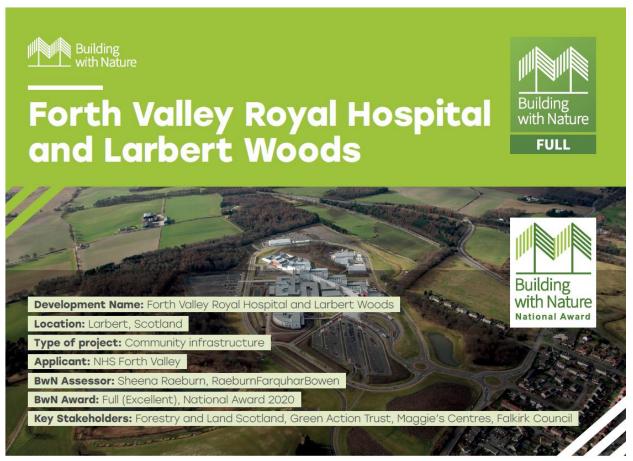


Forth Valley Royal Hospital and Larbert Woods

"Forth Valley Royal Hospital and Larbert Woods is a national exemplar for demonstrating what is possible when a shared vision between ambitious and committed partners is delivered with fastidious attention to the detail set out by the professionals responsible for protecting and enhancing landscape quality in the early stages of design.

The partnership between NHS Forth Valley, Forestry Commission Scotland and Nature Scot, and the commitment to quality from RaeburnFarquharBowen landscape architects at each stage of delivery, has resulted in the delivery of an exceptional medical facility in a high-quality landscape setting."

Case Study materials





https://www.buildingwithnature.org.uk/indexw





Quality underpins functionality at each stage of the development process, from concept, through to construction, and long-term stewardship of development.

BNG assists the development process by raising the baseline for a development's measurable contribution to nature. For habitat creation/enhancement to optimise benefits to both people and wildlife, both quantity and quality must drive the design green infrastructure.





Thank you







UP NEXT







SPEAKING NOW



Simon Hayman

Regional Director Bouygues Energies & Services

I will be discussing...

"Futureproofing NHS
Estates through
Collaboration and
Partnership"

Future-proofing NHS Estates through Collaboration and **Partnership**

Simon Hayman, Regional Director Bouygues Energies & Services











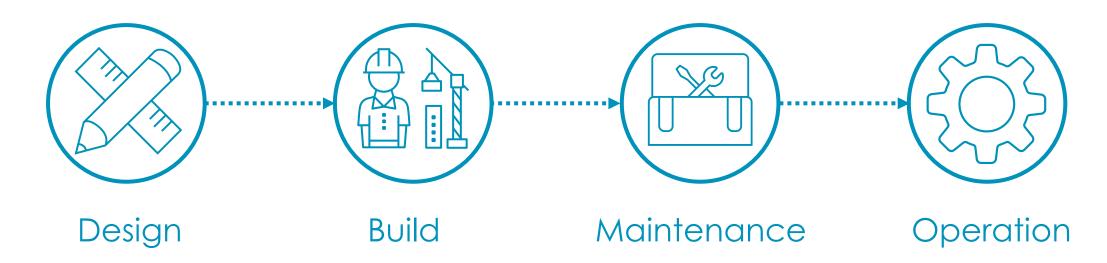
Contents

- 1 Introduction to Bouygues E&S?
- **02** Sustainability
- O3 Digital Transformation (Smart Hospitals)
- O4 Adaptability (Working in a live environment)
- **05** Delivering beyond the PFI

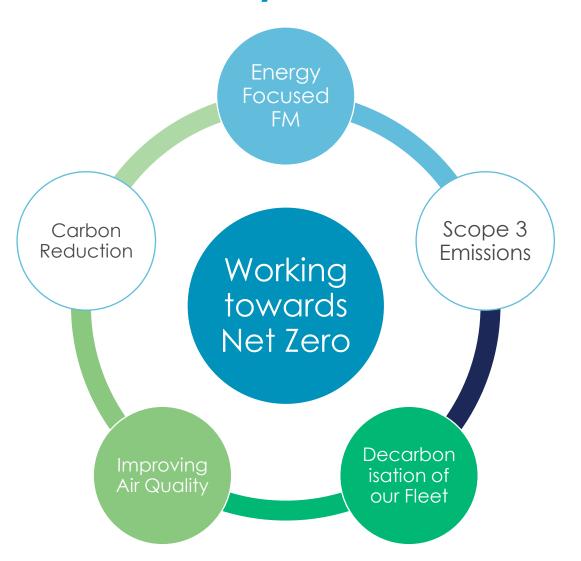
About Bouygues Energies & Services

Bouygues Energies & Services is a global leader in energy, digital and industrial transformation.

We provide distinctive design, build, maintenance and operation solutions through long-term partnerships with 12 Healthcare Facilities in the UK.



Sustainability



The Sustainable Facilities Management Index (SFMI) - Measuring Scope 3 emissions	Bouygues Energies & Services (UK) is supporting (SFMI) in developing contract level Scope 3 footprints.
Carbon Reduction Audits	Energy Focused FM Orbiter Technical Assessments Action Plans
RICARDO Air Pollution Footprint Pilot Scheme	Develop and implement a scheme for company reporting of air pollutant emissions
Electrification of Vehicles	30% of Vehicles Electric
	2/3 Hospitals E-Cargo Bikes
	70% of Hospitals with EV Charging Points
Decarbonisation of the Heating	District Heating Networks
	Heat Pumps

Actions

Digital Transformation

Smart Hospitals

- Integrating all clinical, building and IT systems together, enabling them to be interoperable and then creating automated workflows to improve both the patient and staff experience
- Bouygues (UK) Ltd/Plan Group
- Bouygues E&S/Equans



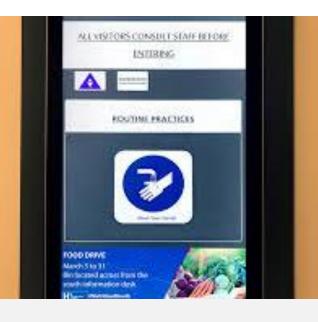


Digital Transformation - Smart Hospitals



Integrated Bedside Terminals

 Empowers the patient experience by providing the ability to control the lighting and temperature as well as have video calls with nurses and educational / entertainment programs.



Room Sign Monitors

 These provide valuable information regarding the patient special needs and status of the room readiness.



• To Improve Patient Flow



Clinical Mobile Device

• Ensuring the right information, gets to the right people, at the right rime, at the right place and in the right mode.



Adaptability Working in a live environment

- Variations to deal with Health Inequalities & Patient Flow
 - North Middlesex University
 - Southmead
- Early Engagement
- Scope
- Mitigating Inflation Risk
- Procurement
- Strong Relationship with Suppliers
- Pay the Supply Chain on Time (69% through SME)



AdaptabilityCollaboration



Design development – joint working group



Risk management – working in live environment



Project management – competency, experience, hit the ground running

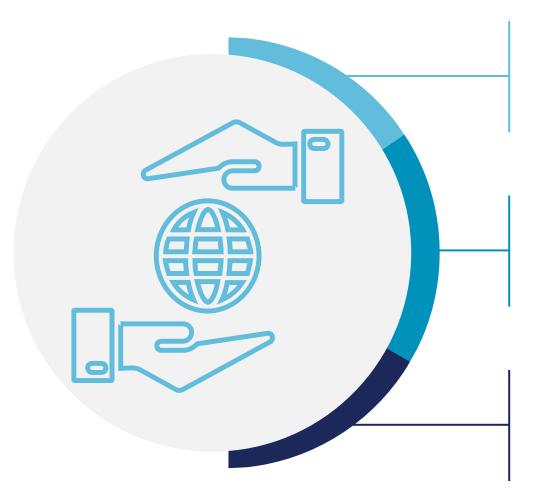


Communication – liaison with stakeholders, SPV, user groups



Delivering beyond the PFI

Our Commitment



- Working alongside you every step of the way
- Actively seek to mitigate all and any risks to the NHS

- Collaboratively producing a route map
- Ensuring that you have all necessary and up to date documentation & information

 Working alongside the NHS, planning for future service provision, defining and procuring their Target Operating Model.

Thankyou in in















SPEAKING NOW



Simon Hayman

Regional Director
Bouygues Energies &
Services



Dr Gemma Jerome FLI

Director Building of Nature



Nicola Theron

Director of Estates North Central London Integrated Care System





MORNING BREAK





Event Chair – Chair Morning Reflection



Nicola Theron

Director of Estates

North Central London Integrated

Care System





UP NEXT



Modular Healthcare Solutions



Modular Healthcare Solutions

The NHS Estates & Facilities Conference 2023

Modern Methods of Construction (MMC) for refurbishment of existing Hospital Interiors

Ian Strangward
Architectural Wallsz
Managing Director

Wednesday 1st March 2023



"We have been building the same way for 200 years... but now assumptions are changing that will drive demand for automation, ownership, scalability, speed, and the need for zero carbon emission — all of these drivers are unprecedented in the construction industry."

MCKINSEY & COMPANY 2020



INTERIORS PREFABRIC





A Drive to Prefabricated Solutions:

- Full fit-out solutions
- Segregation Pods (negative pressure rooms)
- Isolation Pods
- Med Gas Head Walls
- Integrated Plumbing modules
- Offsite construction will become mainstream





Prefabricated Interiors

- Clean and sustainable construction
- Rapid installation
- Cost effective
- Flexible, Adaptable and Future Proofing
- 10 Year warranty on materials
- Easy to install, disassemble and reconfigure
- Privacy of speech



National Institute for Health and Care Excellence (NICE)

- 300,000 patients a year acquire an infection whilst receiving care within the NHS

Steps recommended to prevent transmission are:

- Set cleaning protocols
- Surfaces that resist contamination and are easily cleaned
- Physical barriers such as single patient rooms



Drive for Single Rooms

- Daily Mail article Oct 2022

- NHS Medical Director Stephen Powis said single rooms should be the 'default' as they boost privacy and infection control.
- 'We expect hospitals to consider a minimum of 50% single rooms when investing in new or refurbished hospitals'

Architectural Wallsz

Single rooms in hospitals are squeezing out the ward

NEW hospitals may have to be built with single patient rooms only in a bid to boost privacy and tackle infections.

It could mark an end to the hospital ward in which multiple patients occupy beds separated by curtains in one room.

Only half of rooms in new hospital buildings are required to be single patient only but chiefs at the New Hospitals Programme (NHP) are assessing whether to raise this to 100 per cent, according to a report by the Health Service Journal.

The move could see major design changes to the £3.7bil-

'Boost privacy and tackle infections'

lion government plan to build 48 new hospitals by 2030, as well as an estimated hike in costs of five per cent.

NHS England medical director Professor Stephen Powis last year said single rooms should be the 'default', as they boost privacy and infection control.

There are 57,248 singlepatient-rooms and 1,676 isolation rooms out of 130,000 beds across health sectors.

A Department of Health spokesman said: 'We expect hospitals to consider a minimum of 50 per cent single rooms when investing in new or refurbished hospitals. Our team is consider[ing] a requirement for 100 per cent single rooms in new builds.'

Modular Healthcare Solutions

Designing Generic Clinical Support Spaces (HBN 00-03)

- This note provides guidance on the design and layout of generic spaces such as bedrooms, consulting rooms and offices. It includes detailed drawings that show the ideal spacing and layout of rooms
- One of the main principles highlighted in the document is that rooms should be generic where possible to allow for flexibility in future use



Infection Prevention Materials

Five Surface characteristics to consider when selecting furnishes

- 1. Durability
- 2. Cleanability
- 3. Inability to support microbial growth
- 4. Surface Porosity
- 5. Absence of Seams



Space Planning

- Prefabricated solid walls are designed for new single rooms within an existing or new facility. Space can be limited and the corridor space for movement of beds and people becomes a logistical challenge
- Our design software exists to determine the gangway required for bed movements within a ward



Sliding Door Design

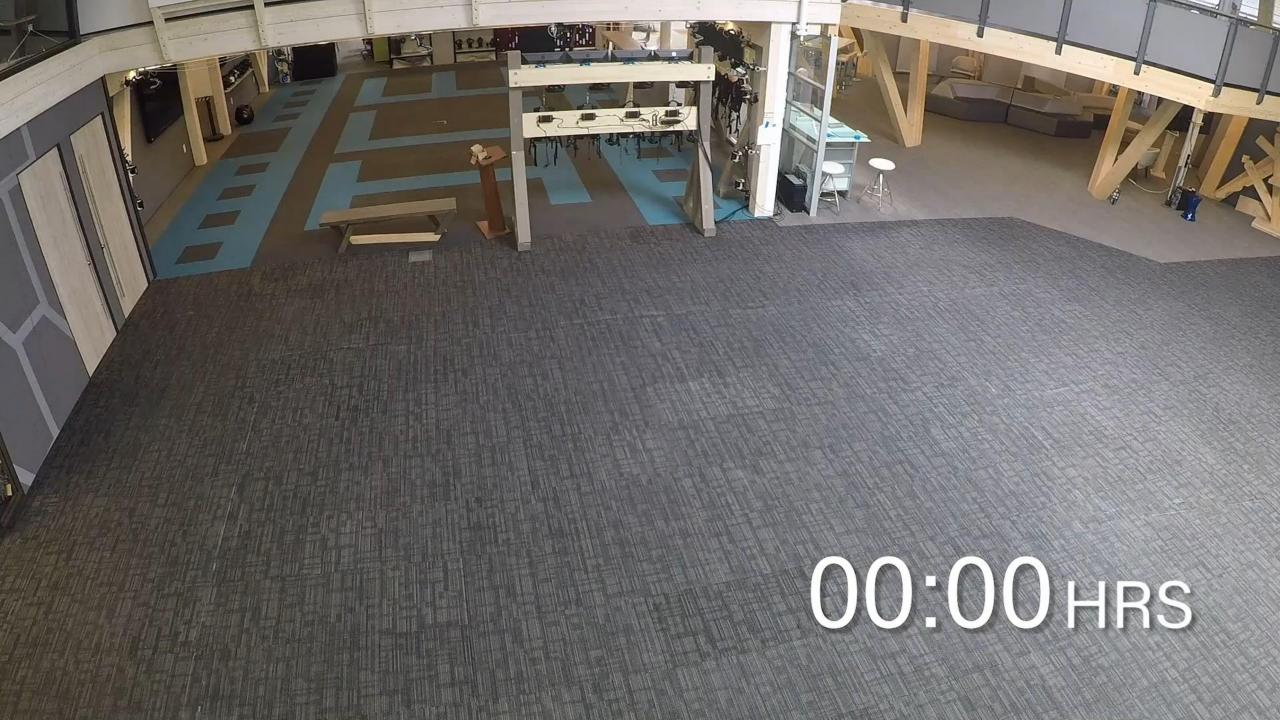
- A great solution for space planning is a sliding door that creates a 1m opening for nurses and clinicians for entry in and out of the room
- When beds are required to move in or out of the room, the door is able to become a 'breakout' door and pivots to open
- The breakout door creates a 2m wide opening for bed transfers and makes the Pod easy to use in an emergency situation











Ventilation Design

- Specialist Consulting Engineers are engaged to design the ventilation and filtration methodology
- For segregation Pods, designs comprise new dedicated HEPA 14 filters with extract fans independent of the Hospital ventilation system
- Segregation Pods will achieve a minimum of 10 air changes per hour and operate under negative air pressure at 5-10Pa

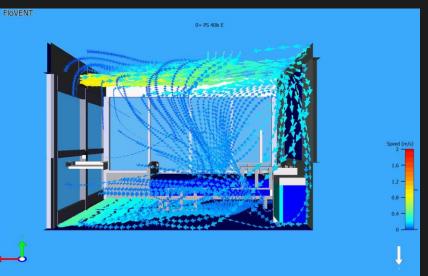




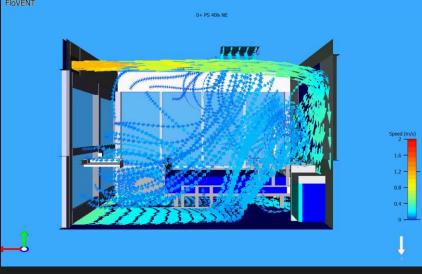




Example Segregation Pod used for Building Model



Speed (m/s)



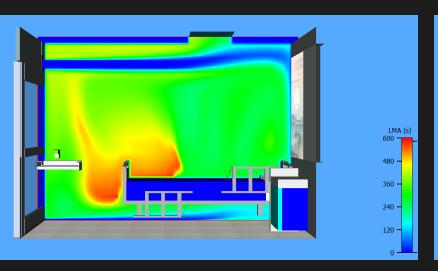
Ref 1: Pressure stabiliser central above the door

Ref 2: Pressure stabiliser low level through side of the pod

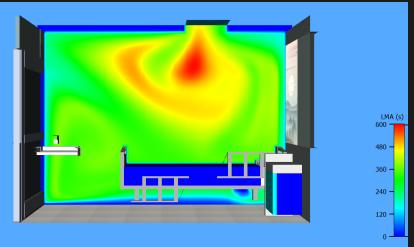
Ref 3: Pressure stabiliser in top corner of front wall

3D Vectors – 40 l/s through stabiliser and 19 l/s under the door.





Ref 1: Pressure stabiliser central above the door



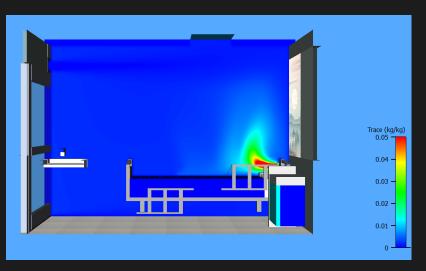
Ref 2: Pressure stabiliser low level through side of the pod



Ref 3: Pressure stabiliser in top corner of front wall

Local Mean Age – 40 l/s through stabiliser and 19 l/s under the door.

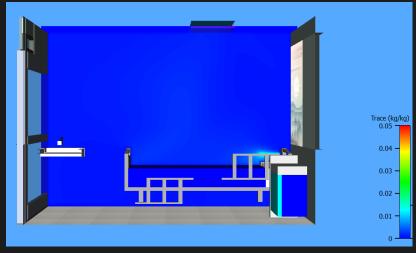




Ref 1: Pressure stabiliser central above the door



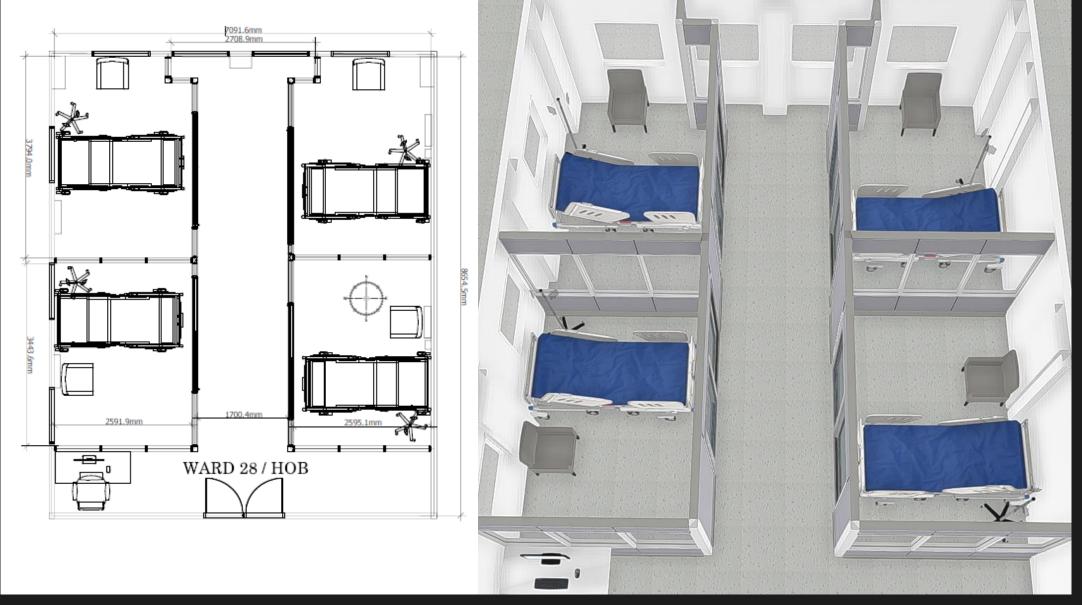
Ref 2: Pressure stabiliser low level through side of the pod



Ref 3: Pressure stabiliser in top corner of front wall

Trace – 40 l/s through stabiliser and 19 l/s under the door.





Prefab is a different way to build.



Prefab is a different way to build.



Prefab is a different way to build.

Isolation Facilities for infectious patients in acute settings (HBN 04-01 Supplement 1)

- Single-bed rooms are effective for isolating patients with infections such as MRSA, but in some circumstances it may be necessary to provide a higher level of isolation
- Patients with airborne diseases or for immuno-suppressed patients who may be at risk of infection from others
- In these cases, an isolation suite which includes an entrance lobby, bedroom and ensuite sanitary facilities will be required



ENVIRONMENTAL STATISTICS

NORTHERN LINCOLNSHIRE & GOOLE NHS TRUST











3,880

Kilograms of plasterboard waste prevented from entering the landfill

Prevents **1,516** kgs of hydrogen sulfide (H₂S) and **3,196** kgs of carbon dioxide equivalent (CO₂e), by avoiding plasterboard decomposition in the landfill

47

Kilograms of paintbased VOCs and

6

Kilograms of plaster and tape-based VOCs prevented from off gassing 86%

Recycled content in wall solution

84%

Recycled content in casework solution 1.8%

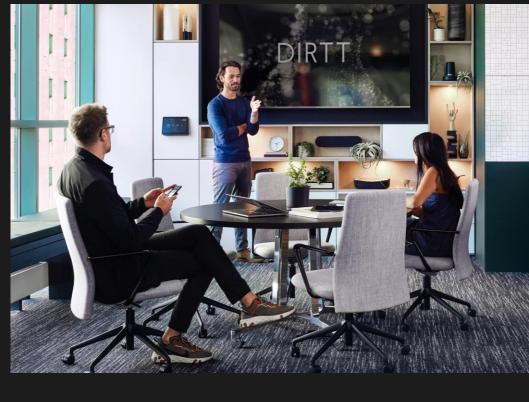
bio-based content in wall solutions 668

Recycled denim jeans in wall insulation and 53% less CO₂e than conventional fiberglass insulation









Deliver value. Build it to last.

CONTACT INFORMATION anna@awallsz.com lan@awallsz.com

THANK YOU

Architectural Wallsz

Modular Healthcare Solutions





SPEAKING NOW



Ian Strangward

Managing Director Architectural Wallsz (International) Ltd

I will be discussing...

"Modern Methods of Construction (MMC) for refurbishments of existing Hospital Interiors"





UP NEXT







Hybrid & hubs: How the public sector is unlocking potential with hybrid working



Matt Etherington

Head of NHS and Corporate
Sales
Matrix Booking



Paul Fitzpatrick

Director of Estates & Facilities
- Liverpool University Hospital
NHS FT



Phil Shaw

Divisional Director Tilbury Douglas



Nicola Theron

Director of Estates North Central London Integrated Care System



by **S** matrix booking

Matt Etherington
Head of NHS Sales & Account Management
Matrix Booking

The Hybrid and Hubs Series

- 1. Government Property 2030 Conference (Manchester) 7th September 2022
- Public Sector Proptech 22 (London) 2nd November 2022
- 3. NHS Property 2022 (London) 15th November 2022
- 4. NHS Smart Estates Virtual Conference 16th November 2022
- 5. Government Property 23 (London) 8th February 2023
- 6 NHS Estates Conference (London) 1st March 2023
- 7. Local Authority Properties and Estates 19th April 2023

























Key takeaways so far

- Hybrid working is a constantly moving target, an 'ongoing experiment'
- ▶ We are only now close to the point of evaluating progress so far, and adapting
- ► There is no One Size Fits All when it comes to Hybrid Working. Different solutions are required for different organisations
- Staff engagement is key are we imposing or are we engaging?
- ▶ There often needs to be a reason to come into the office
- ▶ Different solutions are needed to address the 'Tuesday, Wednesday, Thursday' problem
- ▶ Make the office a magnet, rather than a mandate
- Data, data, data...

Today's Panelists



We are pleased to introduce our panel for today:

Nicola Theron

Director of Estates - North Central London ICS

Paul Fitzpatrick

Director of Estates and Facilities - Liverpool University Hospitals NHS Foundation Trust

Phil Shaw

Divisional Director, Tilbury Douglas

Question 1



How have working practices changed within your organisation over the past 3 years in relation to agile/hybrid working?

Read more about the Hybrid and Hubs Series:



Question 2



What changes are you seeing in the way NHS/Health space is built/designed/adapted to accommodate new ways of working?

Read more about the Hybrid and Hubs Series:



Question 3



What areas form the core aspects of NHS/Health estate strategies moving forward?

More clinical space, reduced footprint, cross-functional spaces, cross-trust/local authority resource sharing

Read more about the Hybrid and Hubs Series:





Audience Questions

Thank You



Read more about the Hybrid and Hubs Series:







SPEAKING NOW



Fay Lane

Apprenticeship Relationship Manager Health Education England



Lucy Rowe

Young Persons & Diversity
Lead
NHS England

We will discuss...

"NHS Estates and Facilities - Apprenticeships"



NHS Estates and Facilities Workforce

Workforce Transformation and collaboration

Lucy Rowe, Young Person and Diversity Lead, NHS England

1st March 2023



Our key challenges



Low market profile



Competition



Recruitment processes



Engaging young people



Career opportunities



Diversity and inclusion



Tools to support action & collaboration 2022/23

- ✓ National Estates and facilities Workforce Action Plan Published, June 2022
- ✓ National NHS EFM Apprenticeship Challenge, launched April 20222
 - ✓ ERIC and DoH data
- ✓NHS EFM Workforce Engagement Forum: Collaboration!
- ✓NHS EFM Workforce Dashboard:
 - ✓ Headcount, ED&I summary, breakdown & trends, ICS breakdown, vacancies, staff turnover, sickness
- ✓ NHS EFM Workforce News Update Bimonthly
- ✓NHS Estates Team Futures Platform Collaboration Hub
- √ Case studies / deep dive webinars bespoke to NHS EFM



Workforce Insight

- > 75,600 directed employed staff (ESR)
- \geqslant 80% of our workforce bands 1 3
- ➤ Women make up **62%** of workforce at bands 1 to 3 and **27%** of band 4 and above positions.
- ➤ BAME staff make up **20%** of workforce at bands 1, 2 and 3 and **11%** of band 4 and above positions.
- ➤ 41% of the EFM workforce is over 55 years old, which is significantly higher than the overall NHS workforce (21%).
- ➤ Only **3.65**% of our EFM people are under 25 years of age which is in line with the rest of the NHS workforce **(5.4%)**

Headcount by region East of England 6k London 7k Midlands 5k NE and Yorkshire 16k North West 13k South East 10k South West 9k



NHS EFM Workforce Dashboard – Demo

NHS EFM Workforce Dashboard: Equality, Diversity & Inclusion (ED&I) Summary





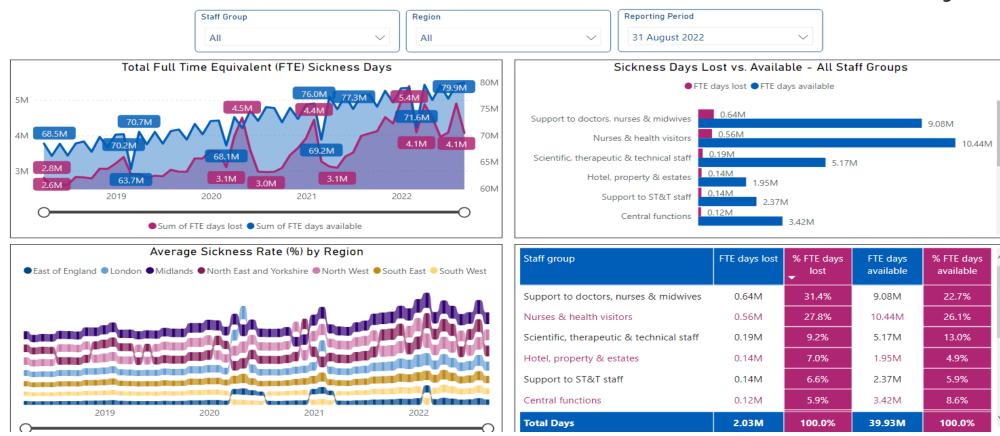
Microsoft Power BI



NHS EFM Workforce Dashboard - Demo

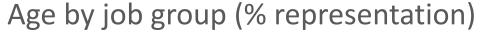
NHS EFM Workforce Dashboard: FTE Sickness

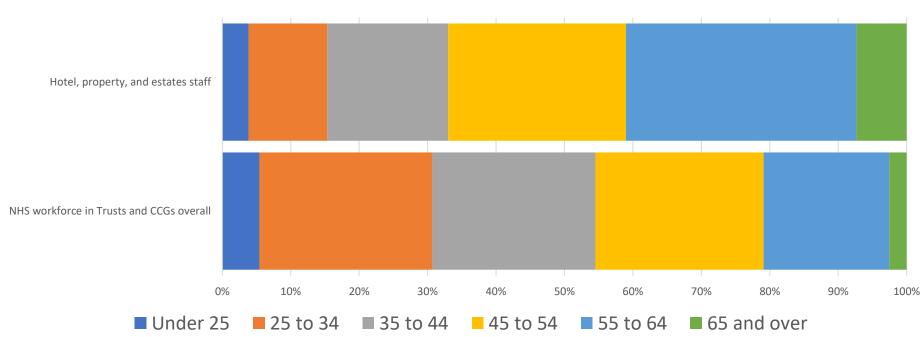






EFM Workforce by age compared to NHS

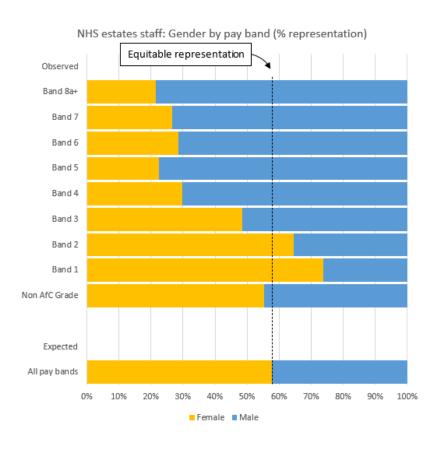




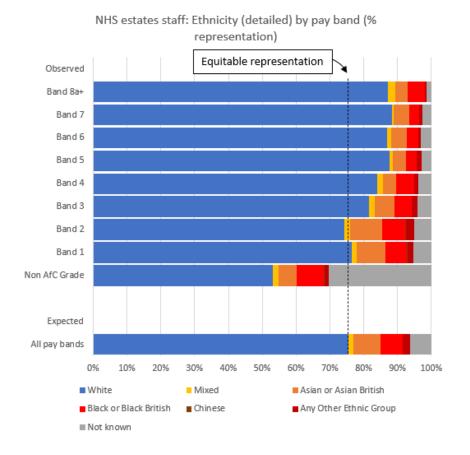
Our workforce representation gender & ethnicity



EFM Workforce Gender by AfC pay banding:



EFM Workforce Ethnicity by AfC pay banding:





Collaboration with Health Education England











Harry Sandy, a production chef apprentice at **West Suffolk NHS Foundation Trust**, was encouraged to join the NHS by his mum who works in NHS mental health services.

Harry's first experience of working in kitchens was as a pot washer at his local pub. After about a year, he moved across to the chef side of the kitchen, but then the COVID-19 pandemic stalled his progression.

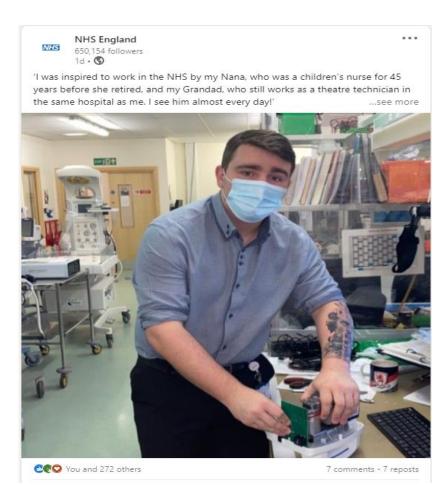
He says, 'My mum encouraged me to join the NHS, as did the hiring manager who saw my previous experience and interest in being a chef.'

Harry says that the apprenticeship has helped him to develop skills including knife work and organisation, both of which are incredibly important when working to strict deadlines to serve patients.

This year, we're aiming to have 1,000 new apprenticeship starts in NHS estates and facilities, in roles from engineering and plumbing to catering and sustainability.

Find out more about apprenticeship opportunities: https://lnkd.in/exQZQS_W #apprenticeships #nhscareers #apprenticeshipchallenge #nhsestates #NAW2023





In the pipeline

- NHS ICS Infrastructure Strategy Workforce toolkit and Data Pack
- ICS Data used for site visits
- Employer Brand: Attraction, awareness and 'offer'
 - Apprenticeships
 - Flexible working
 - Pension
- Apprenticeships Use the levy, increase our offer across the board, degree apprentices, employer led
- Equity in EFM aspiration, direction, positive action



NHS APPRENTICESHIP LEVY FUNDING



Levy payer Does the employer have an annual pay bill in excess of £3m?

£1,000,315,317

£445,436,338

£554m

Levy contributions of 181 NHS employers across the UK showed apprenticeship service accounts.

May 2017 to April 2022

Amount of levy withdrawn and used for training or assessment purposes.

May 2017 –April 2022

These figures suggest
55% of funds either
remain unused or
have been lost and
returned to the
Treasury

Levy-payers can put their contributions towards 100% of the course cost





Links and contact

- NHS England » NHS estates and facilities workforce action plan
- NHS England » NHS Estates and Facilities Workforce: Apprenticeship Challenge
- NHS EFM Workforce Dashboard Microsoft Power BI
- NHS Estates Team Collaboration Hub NHS Estates and Facilities (future.nhs.uk)
- NHS Workforce forum and team <u>efmworkforce@nhs.net</u>

Young Person and Diversity Lead
Lucy.Rowe3@nhs.net
(21) Lucy Rowe | LinkedIn





Estates and Facilities Apprenticeships Collaboration and Transformation

Fay Lane, National Programme Manager, Health Education England

1st March 2023

Health Education England - Our Work Programme

Development Implementation Quality Sustainability Crosscutting

A Technical Education • HEE supported National A Postcories with rest

- Technical Education reforms-
- Trailblazer strategy and development – Employer leadership support and facilitation
- T Level development and Implementation
- HEE Partnerships DfE, Institute, ESFA - Policy development

- HEE supported National Procurement solution
- Planning/system integration and scoping
- Employer engagement and facilitation
- Technical support eg Toolkits
- Spread of best practice
- Partnering with prof organisations and regulators etc
- Launch of Quality Plan
- Support for TP provision
- EPAO support
- Getting OFSTED ready
- Evaluation of Impact
- Case studies/Feedback Activity

- Education Policy reform -Employer
- Support Funding -Future business case – ROI and VFM
- Links to LTP
- · People plan
- Organisational structure
- Embedding in WFPs and Talent Planning

- Work with other professions/industries
- Communication/wider
 Stakeholder management
- Wider reform agenda tech ed, economy, social mobility
- Care Certificate/HCSW Voice
- WAP, schools agenda
- NHSE/I levers e.g. HCSW Pipelines
- Princes Trust, Project Choice, Unions/Staff Side

Transformation

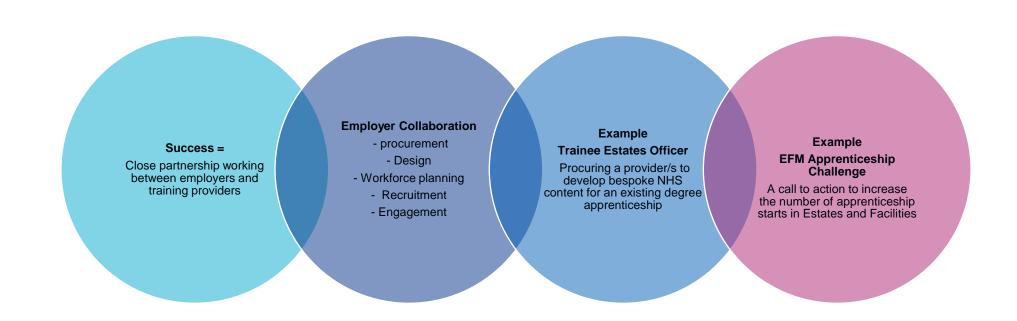
Apprenticeships can be used both for the development of new and existing staff of all ages, across a wide range of occupations and job roles.

- Creating new entry routes into the workforce
- To support inclusive growth: providing opportunities to under-represented members of the community to access opportunities
- An additional and proactive means of building capacity in the workforce
- To encourage the wider workforce to embed new skills and learning into their day to day practice
- Workforce transformation
- Support workforce planning

Collaborative Working

Can we create systematic apprenticeship solutions?

Working together to plan design and deliver estates and facilities apprenticeships



Resources

- Estates and Facilities Toolkit
- Facilities and Estates HASO (skillsforhealth.org.uk)
- Facilities and Estates (Hard)
- Facilities and Estates (Soft)
- Facilities and Estates Management
- Facilities and Estates Sustainability
- Estates and Facilities Apprenticeship Challenge 2022/2023
- Estates and facilities | Health Careers

Thank You

Fay Lane Apprenticeship Relationship Manager (NE&Y) Fay.Lane@hee.nhs.uk

@ Faybelane

https://haso.skillsforhealth.org.uk/





UP NEXT







SPEAKING NOW



Mark Hand
Business Development Director
Mobilityways

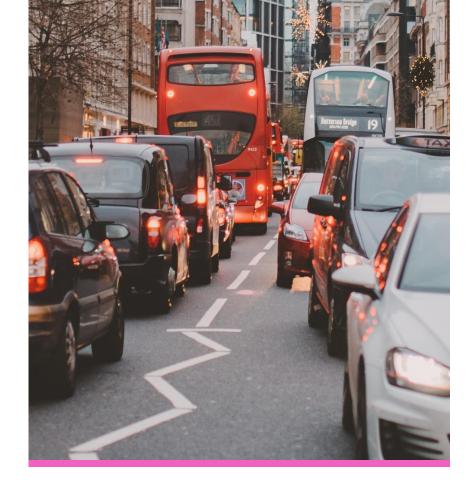
I will be discussing...

"Zero carbon commuting - lessons from trailblazers"



The urgent need for Zero Carbon Commuting

The commute is the least efficient journey we ever make, contributing 18 billion kg of CO2e annually - 5% of total UK emissions. Unless we decarbonise the commute, we will fail our net zero goals in the UK.





We must deliver a step change in the breadth and scale of our ambition to reduce transport's GHG emissions to reach net zero.

Rt. Hon. Grant Shapps MP | Transport Decarbonisation Plan

Addressing requirements

Trusts tell us that these things matter

Recruitment and retention

Health and wellbeing including financial

Addressing the imbalance between demand and supply of parking – parking management is however just one aspect of wider travel and accessibility needs for health locations

Visitor and patient experience

Revenue generation

Your sustainability and air quality commitments

Net zero by 2045

Trusts are required by **their contracts with the NHS** to:

- produce a green plan including travel
- report annually quantitative progress data

And as part of a programme to <u>improve air</u> <u>quality</u>

 develop and operate expenses policies for staff which promote sustainable travel choices.



Achieve net zero targets

Expedite your organisation's progress towards net zero

Dent the cost of living

Sustainable commuting delivers cost savings to both organisations and employees

Recruitment & retention

Access a greater pool of talent and reduce attrition in your team

Improve wellbeing

Encourage good mental and physical health in your teams

Why us?

Proven results

we've helped over 700 leading UK organisations save over 1.3 billion commuting miles

Trusted partner

of UK government departments, universities and hospitals

Ground-breaking software

one comprehensive platform for all your net zero commuting requirements

Heathrow





national**grid ARUP**





























Mobilityways Solutions

Ground-breaking employer climate tech, empowering organisations to measure, reduce & report their commuter emissions.

Measure

Measure your commuter emissions & scope the potential for change

Travel Survey

Commuter Emissions Calculation

Scoping

Build, send and review employee travel surveys with ease

Calculate your organisation's total and average commuter emissions

Identify real-world sustainable commuting potential for your team

Reduce

Reduce employee commuter emissions via our proven approaches

Personal Travel Plans

Liftshare For Work®

Sustainable Car Park Management

Parking Policy Creation & Monitoring

Tailored Engagement Strategy & Toolkit

Zero Carbon Commuting Roadmap©

Communicate sustainable commute options to each employee

Help employees find a lift - saving money & reduce parking demand

 $\label{lem:continuous} A \ \text{sustainability-first mindset from permit is suance to validation}$

Deliver sustainable commuting plans to each employee

Engage your team to drive forwards commute behaviour change

Develop the targets and strategy for your organisational context.

Report

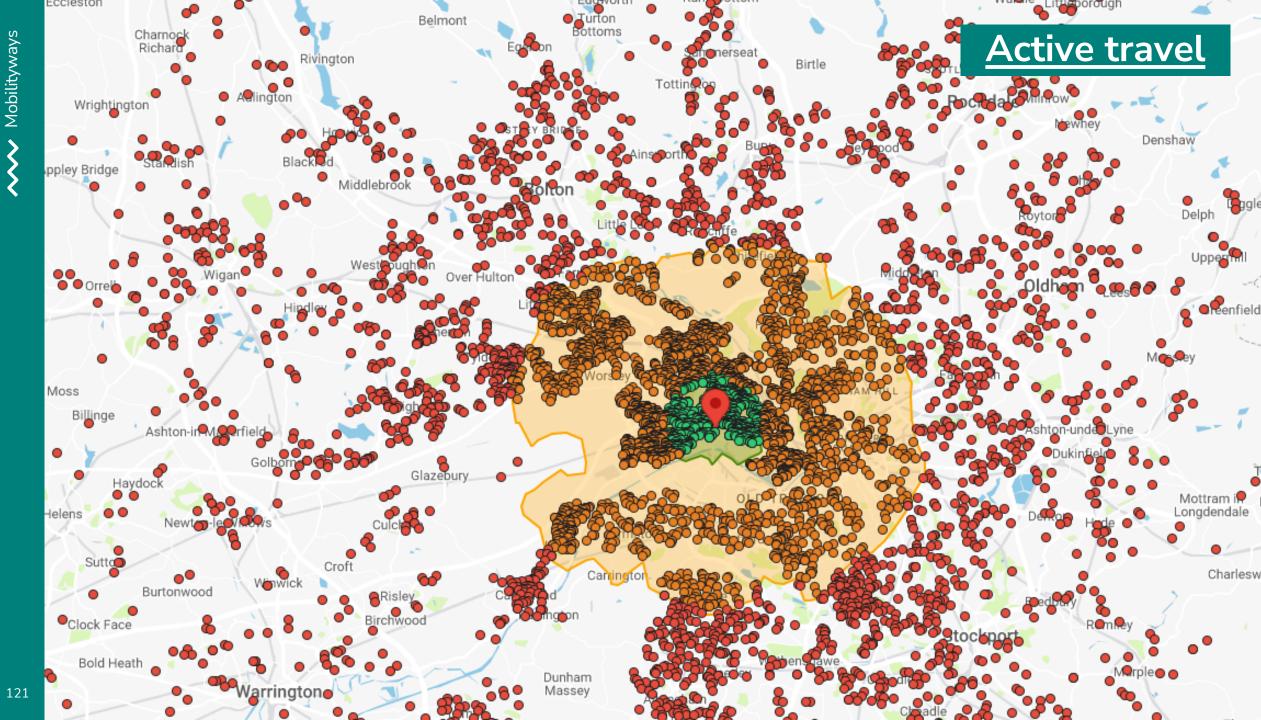
Report accurately your organisation's commuter emissions and progress against targets

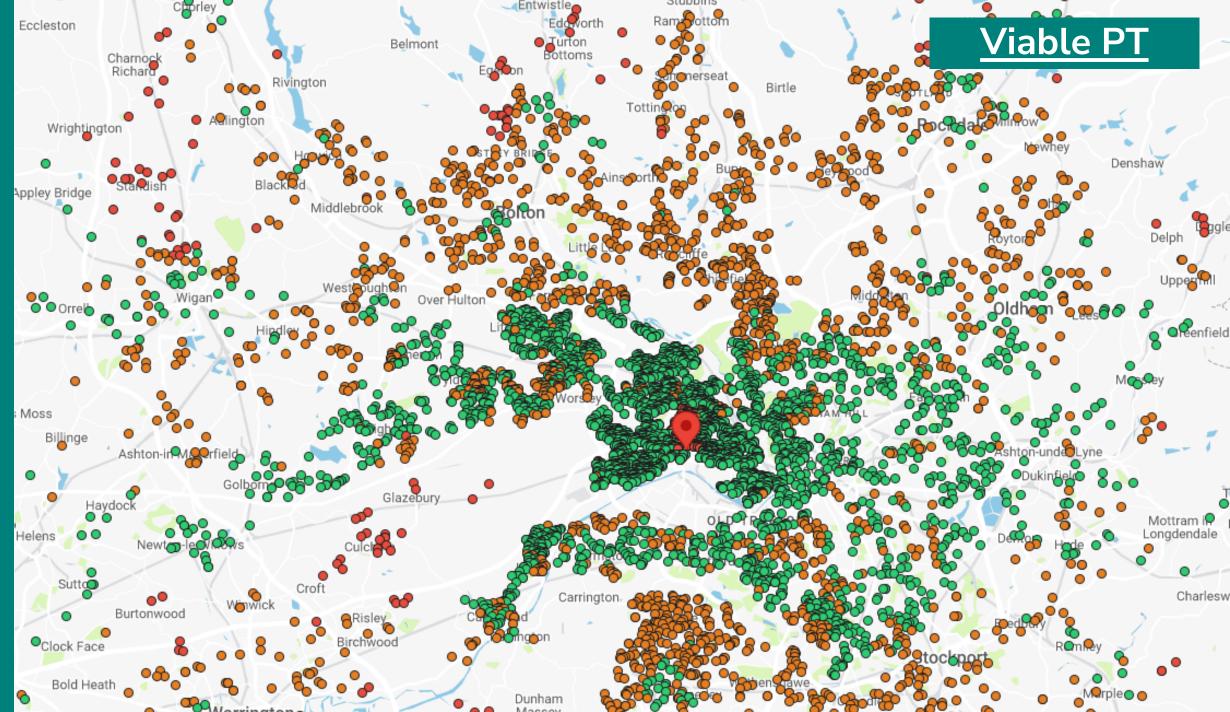
Dashboard

Commutologist Consultancy®

Access all your commuter emissions data in one place

Expert advice and support to accelerate your progress





Employer engagement, NHS

Salford Royal	Number	Active travel	Viable public transport	Liftshare	LS with at least 10 options
Scoping	7,687	57%	58%	97%	89%
Survey results, actual behaviour	841	5%	3%	2%	-



Build your internal coalition

- Other departments need to be involved from procurement through to implementation.
- Don't operate in a silos, get them involved early in the process to support greater embedding across the organisation.
- Their support ensures that project runs more smoothly and you don't need to repeat the "why" internally.
- Every department has something to gain from its success.



Engage external stakeholders

- Zero carbon commuting can't be achieved on our own.
- We don't provide much of the infrastructure.
- It is critical to share the data insights early with the Local Authority and local transport operators.
- Can be great at improving relationships with LAs – they will love the data and will value the engagement.



Make the theory real

- The Scoping "best case" is not the same as what's achievable in the short term.
- Modal shift requires colleagues to change behaviour, and behaviour change is challenging!
- Important to be presenting to colleagues realistic and achievable initial steps alongside the long-term vision.



We should have started earlier

- Time is running out for the planet!
- Even with the best intentions, everything takes longer that intended, if we'd started sooner we'd be further down implementation.
- 2030 is now less than 7 years away and worth remembering that the Climate Change Act requires net zero across all NHS Carbon Footprint by 2045.



Parking is key

- It's important to look at the operational return on investment not just the CO2e savings.
- Solving the real pain points in the Trust are the easiest ways to gain buy-in for zero carbon commuting.
- Often seeing tangible results, rather than simply CO2e savings, is critical for the project to grow momentum.



MEASURE > REDUCE > REPORT

Sustainable Car Park Management

A sustainability-first mindset from permit issuance to validation

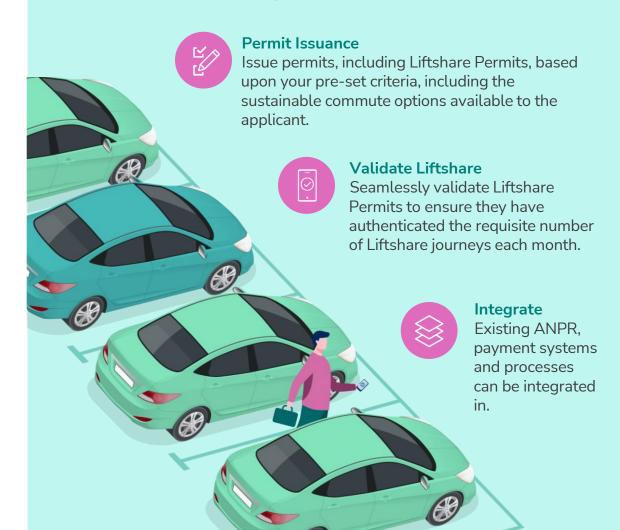
BENEFITS

- Restrict parking permits only to those employees without viable sustainable commute options
- Incentivise car-sharing with discounted or priority parking permits
- Seamless workflow from sustainable commuting promotion, permit application and permit issuance to Liftshare validation and parking enforcement
- End-to-end parking solution that can support companion handheld enforcement app, ANPR, permit payments and issuing PCNs



Sustainable Permit Applications

To apply for a permit your team receives a Personal Travel Plan which promotes the sustainable commute options available to them and acts as a gatekeeper for whether they are eligible to proceed with parking permit applications.



Strategic, challenging but worth it.

Enhanced:

- Recruitment and retention
- Health and wellbeing including financial
- Visitor and patient experience

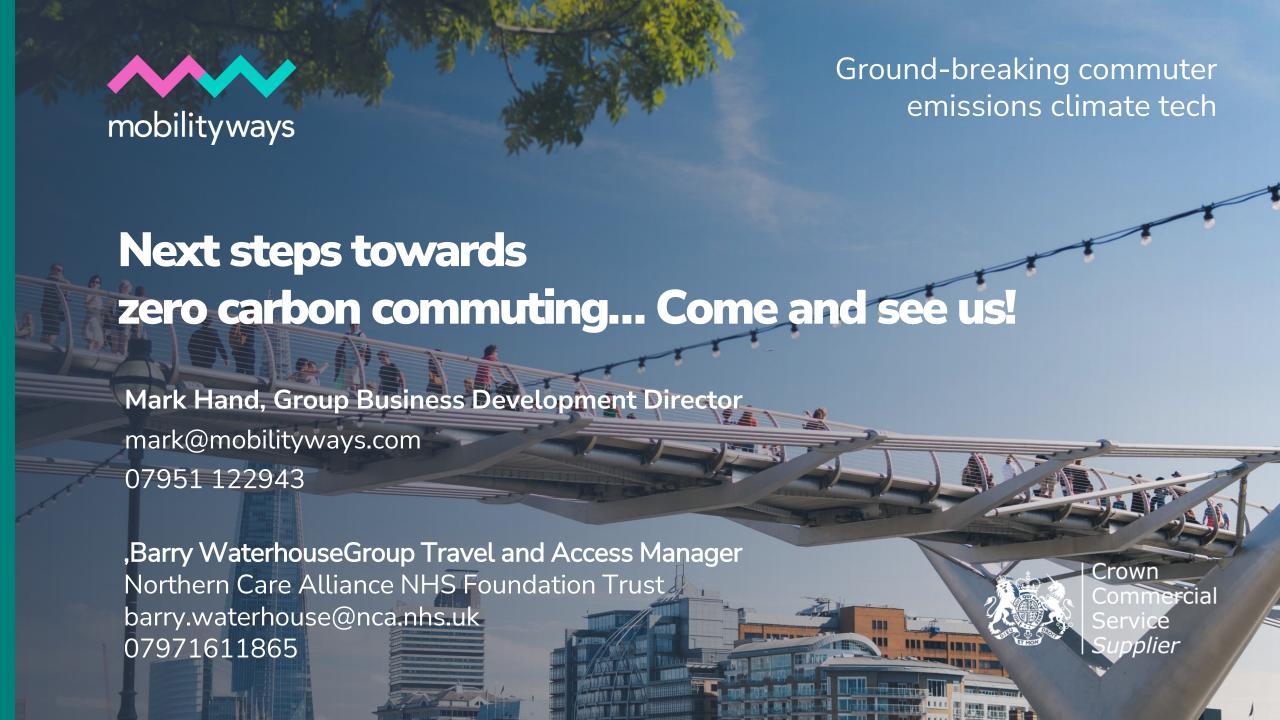
The most efficient use of the finite parking spaces

Higher revenue generation

Reduced congestion and emissions

Enhanced air quality

Admin lite reporting with live data







Q&A PANEL











lan Strangward

Managing Director Architectural Wallsz (International) Ltd

Matt Etherington

Head of NHS & Corporate Sales Matrix Booking

Fay Lane

Apprenticeships
Relationship
Manager
Health Education
England

Lucy Rowe

Young Persons & Diversity Lead NHS England

Mark Hand

Business
Development
Director
Mobilityways





NETWORKING





Event Chair – Chair Afternoon Address



Nicola Theron

Director of Estates

North Central London Integrated

Care System





UP NEXT







SPEAKING NOW



Wayne Yeomans
Sales Director - OSS
Algeco UK Ltd

I will be discussing...

"How offsite construction can help alleviate waiting time pressures currently facing the NHS"



Transforming estates from second class to world class

Wayne Yeomans



Challenging Times

- More than 7 million people are on a hospital waiting list in England – 1 in 8 of the nation's entire population
- Waiting times exacerbated by Covid-19
- Poor condition of many existing buildings - lack of new facilities not helping
- RAAC aerated concrete is an area of concern for many NHS providers
- January Health Secretary announces £50million for temporary modular buildings



Offsite a catalyst for change

- Offsite answers call for speed, quality and value
- The Construction Playbook a catalyst for wider change in the offsite sector
- Recent innovation such as Seismic simplify design and manufacturing processes
- Approach uses a small number of repeatable base designs for NHS applications
- The standardised Seismic approach is:
- √ 75% faster
- √ 47% improvement in value compared to traditional construction techniques.
- √ 70% reduction in operational and embodied carbon.





Reduce waiting times



Certainty of programme, enables 'Speed to Market'



Up to 50% quicker – Reduced programme time equates to Working Capital saving



Best value – Recycle, Reuse or Repurpose your Modular store



Standardisation unlocks efficiencies in design, commercials, and programme



Faster completion, certainty of supply, high PMV before delivery, earlier completion and patients treated – faster ROI



Quality throughout -NPS score of 100 on our latest project reviews





Algeco understands Fast-Track construction



Certainty of programme, enables 'Speed to Market'



Up to 50% quicker – Reduced programme time equates to Working Capital saving



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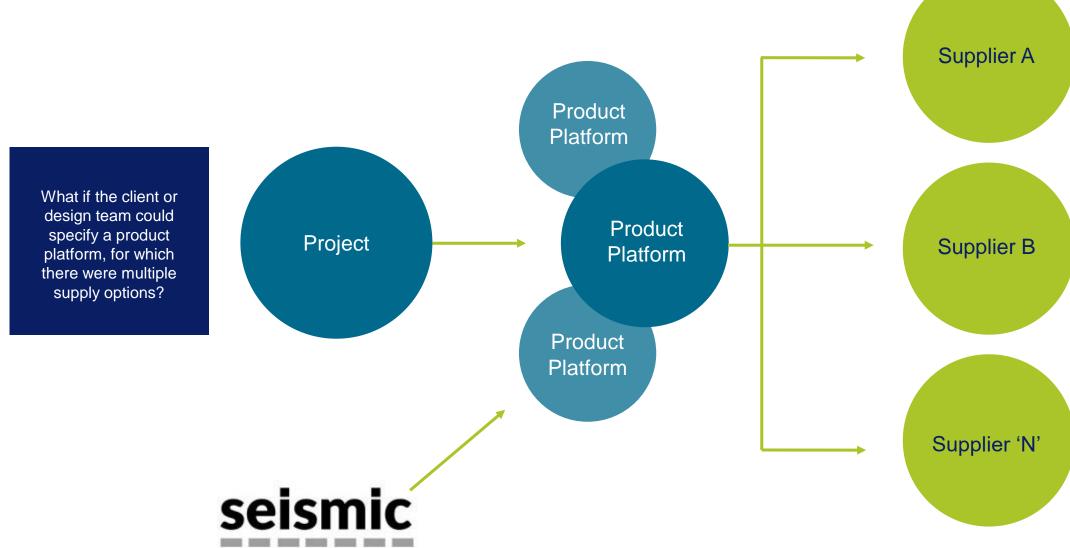
Faster, more efficient than traditional offsite systems

- A 75% improvement in efficiency
 (4.5 modules assembled per day instead of one welded frame module per day)
- A 70% reduction in carbon (both embodied and operational)
- A 47% improvement in value (based on waste reduction and inefficiency alone, (when benchmarked against the UK government's Construction 2025 targets)
- Productivity Improvement in assembly
- Interoperable Componentised Building System





Algeco and Platform Design Solutions







Example Projects



CASE STUDY

King's College Hospital

Location: Central London

- £15m turnkey project, very complex build
- 5-storey operating theatres & wards department –
 infill project on a live hospital site on the 'blue light'
 route and close to a live railway line
- Hybrid structure to lower ground and ground to first, with 4-storeys of Modular structure above.
- Solar shading to two elevations
- 'Off-balance solution' Leasing Framework
- Compliant with Health Building Notes (HBN) and Health Technical Memoranda (HTM)
- Constrained site Strict Health & Safety measures













CASE STUDY

Pinderfields Eye Hospital

Location: Wakefield, West Yorkshire

- Brick, render and curtain wall glazing two-storey permanent building design
- Housing advanced eye clinic and state-of-the-art office accommodation
- High levels of insulation and low energy consumption
- Compliant with Health Building Notes (HBN) and Health Technical Memoranda (HTM)
- Offsite construction enabled patients earlier access to the ophthalmology unit













New community GP Surgeries / Health Hubs

- General practice is the cornerstone of the NHS, helping around 50 million people in England every year, carrying out 370 million consultations last year.
- If the construction industry can mitigate budget constraints through improvements in efficiency of design and modular / MMC construction, this has the potential to facilitate and standardise the design of primary care facilities in line with the NHS strategic planning and predevelopment framework.
- Developers and designers are already making use of standard layouts which are scalable and adaptable. Technology is playing a part in minimising underutilised space (such as storing patient records electronically and continuing with phone consultations adopted during the COVID pandemic), which will free up space needed for physical examinations.
- Adoption of DfMA to bring forward industry changing building technology such as our SEISMIC platform design modular solution.





New community diagnostic centres will provide scans and tests

Within the centres will be state of the art equipment including; a mobile CT scanner, two X-ray rooms and clinical / ultrasound rooms, as well as a space to undertake blood tests.

The Government plans 40 centres to be opened across the country, which will lead to:

- earlier diagnoses for patients through easier, faster, and more direct access to a range of diagnostic tests needed to understand a patients' symptoms
- a reduction in hospital visits which will help to reduce the risk of COVID-19 transmission
- a reduction in waits by diverting patients away from hospitals, allowing them to treat urgent patients, while the community diagnostic centres focus on tackling the backlog
- a contribution to the Trust's net zero ambitions as the building is designed to be carbon neutral





In Short

- Offsite has a major role to play in transforming the NHS estate
- Up to 50% quicker than an on-site build no compromise on quality
- New innovations Seismic platform-based construction system delivers further benefits
- Decant modular hire solution can be used whilst existing buildings undergo remediation
- Algeco has a track record of delivering healthcare buildings
- Algeco delivers speed, quality and value







Thank you

algeco-offsite.co.uk









SPEAKING NOW



Paul Fitzpatrick

Director of Estates & Facilities
- Liverpool University Hospital
NHS FT



Phil Shaw

Divisional Director Tilbury Douglas

We will discuss...

"New Hospitals
Programme:
Transformational Coproduction"



NHS Estates and Facilities Conference 1st March 2023

New Royal Liverpool Hospital Remediation 2018-2022

Paul Fitzpatrick
Director of Estates and Facilities &
Project Director New Hospital Construction



Carillion PFI Project Vision - 2013





Key Dates:



- **2013:** Royal Liverpool and Broadgreen enter into PFI agreement for construction of 646 bed £329m new hospital scheduled to open in 2017
- **Feb 2014**: Construction begins
- **Jan 2018:** Construction ceases due to liquidation of Carillion Hospital was around 90% complete but emerging issues relating to structural integrity and quality issues
- Oct 2018: Responsibility for completion of the hospital transfers to Trust with Laing O'Rourke as Management Contractor
- Late 2020/Early 2021: FBC submitted indicating costs of between £340m £390m to complete and remediate the hospital. PDC approved @ £357.5m (phase 1 only)
- 11th July 2022: Trust accept partial possession of hospital
- 28th September 2022: Trust achieves practical completion confirmed by Building Control and move plan commences
- **22nd October 2022:** Hospital move complete
- Oct 2022 early 2023: Final works on phase 1 to be completed e.g. Clatterbridge Link Bridge
- Oct 2022 onwards: Decommissioning and demolition of old hospital (Phase 2)

Hospital Opening - 2018 2022







New Royal Liverpool Project Delivery Team

- NHS Trust Redevelopment Team:
 Construction and Healthcare Coordination
- Management Contractor LOR
- Directly Appointed Contractors...circa 110
- Project & Finance Managers Gleeds
- Clerk of Works Perfect Circle (Aecom)
- Professional Advisors:
 NBBJ, HKS, Hoare Lea, ARUP, KOK, AY...
- NHS Trust Estates and Facilities Team:
 FM Commissioning and Occupation Logistics



RLUH – New Hospital Project

Primary Workstreams:

- 1. Governance
- 2. Structural Integrity
- 3. Façade/Envelope Safety
- 4. MEP Compliance
- 5. Fire Safety / Compartmentation
- 6. Assurance
- 7. Functional Suitability and Redesign
- 8. Occupation



1. Governance

Based on 2015 thinking and technology, we would undoubtedly do things differently if starting this project now with full "BIM" and Digital Twins throughout construction...

- Numerous programmes with hundreds of lines on each and their revisions updated every 2 weeks (4 years x 25 No a year = 100 programmes issued)
- Over 10,000 drawings from consultants and their revisions picking up Contractual Scope and programme items to complete
- Over 200,000 No individual "field view" works tasks
- 2500 No Contract Administrator Instructions for specific elements of work
- Over 170 Individual Change requests value around £50m of work scope
- "4P" has been used throughout and provides a complete record of all changes and decisions taken on the project



2. Structural Integrity – Remediation Completion December 2020

** 71 Interventions implemented that required works on multiple floors **







3. Façade – Compliance & Remediation 2019/22















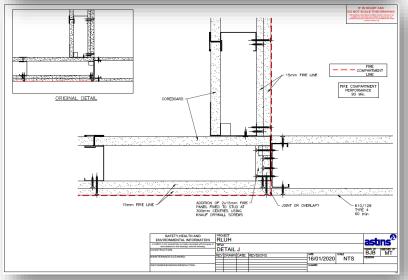
4. MEP Systems— Removal and Reinstallation 2019/22



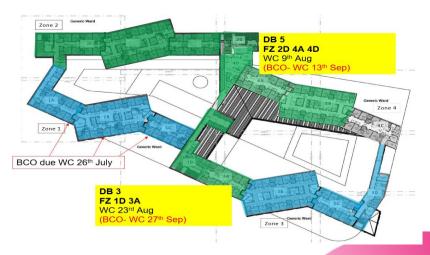


5. Fire Safety – Compliance & Remediation 2019/22





180 fire Zones across 11 floors remediated with every wall junction reviewed and repaired where required

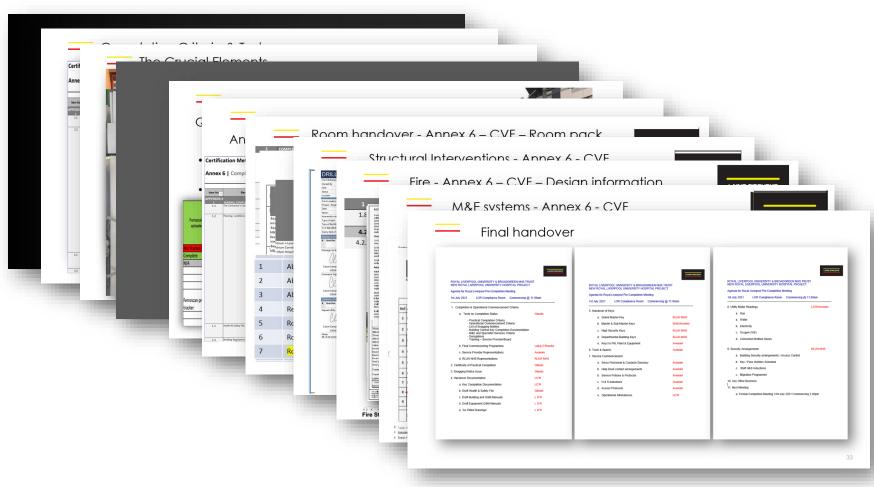


4,500 Dry Lining Wall Abutments Remediated

35,000 Fire Stopping Penetrations Remediated

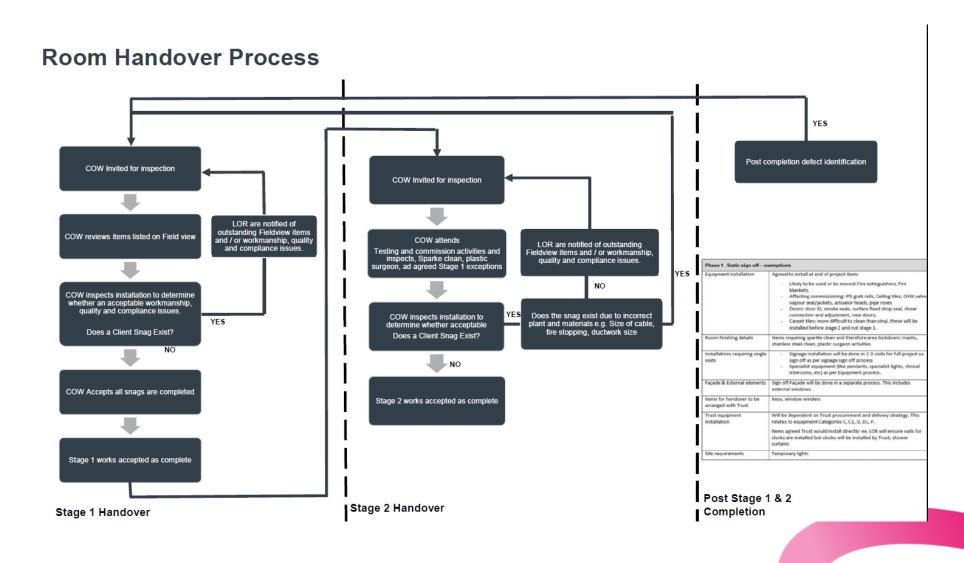


6. Assurance – Completion Criteria 2020/22





6. Assurance – COW / Quality Assurance





Tax Payer cost of a compliant building

1.	Governance	£80m

- 2. Structural £50m
- 3. Façade/Envelope Safety £40m
- 4. MEP Safety/Comp. £50m
- 5. Fire Compartmentation £35m
- 6. Assurance £40m

£295m



7. Functional Suitability – Liverp Fit for purpose hospital for the next generation...





7. Benefit of opportunity for redesign 2020/22

With support of the team.. There were opportunities within the project which have been remodeled with significant changes to the clinical space to meet new service requirements.

- "Agnes Jones" COVID Enablement unit opened for 6 months in 2020
- COVID benefit from lessons IPC, ventilation and patient flow
- Emergency Department "fit for purpose redesign 8 years later"
- Podium drop off "missing piece of the plan"

There have been circa 170 Trust funded improvements to the departmental configuration delivered during the project.



7. Royal Liverpool Hospital – Podium Solution

Stage 1 Podium Drop-off SE Aerial View (Mt Vernon Street)



Hospital Entrances



Blue Light/ PTS



Pedestrian

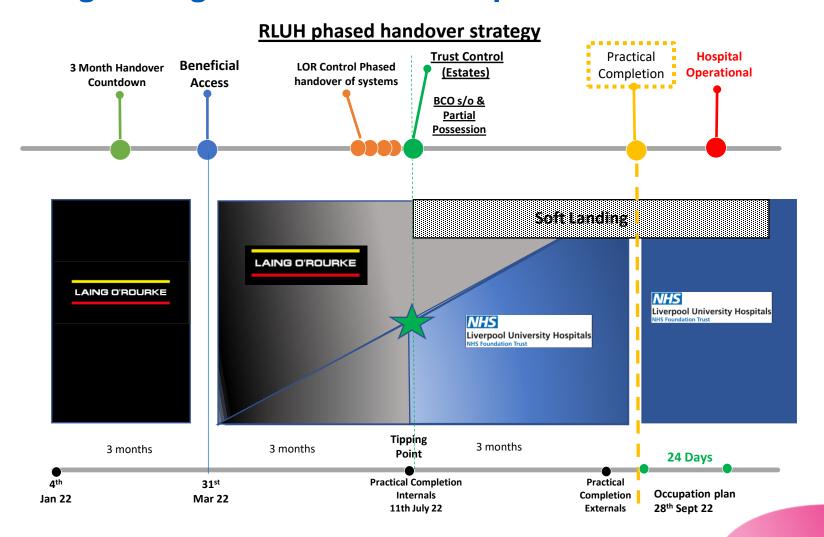


Private Vehicle





8. Post Completion of Remediation Building management March to Sept 22 –



Liverpool University Hospitals NHS Foundation Trust

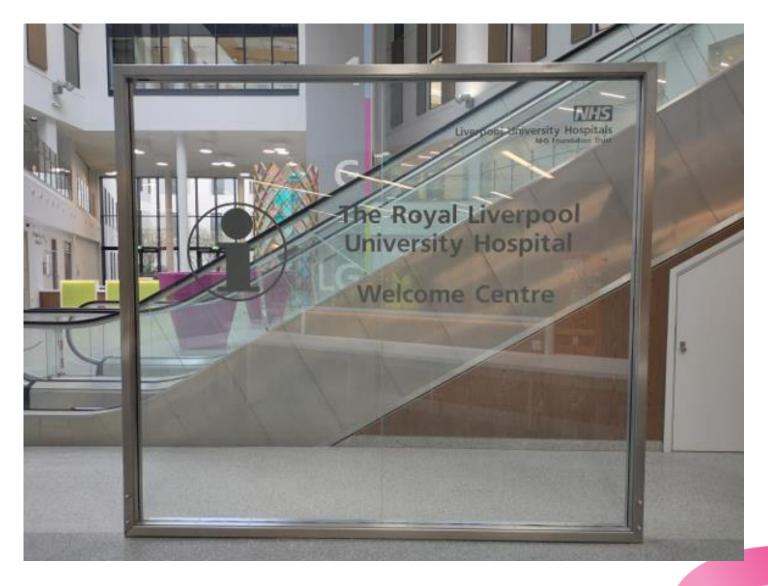
8. Move Plan – 28th September 2022

21 days consecutive days

Day:	Area:			Other Moves	Site Mo	ves:	
Day 1 Wed 28/9	Pharmacy Dispensary moves into CSSB ✓						
Day 2 Thur 29/9	Hotel Services moves into CSSB						
ay 3 Fri 30/9	Outpatients Modules 1,2 & 3 & Hospitality Lounge. Radiology (OPD Provision), Therapies				Urology OPD from BGN to NH		
ay 4 Sat 01/10	Outpatients Modules 1,2 & 3 & Radiology (OPD Provision), Therapies, Nuclear Medicine				Urology (OPD from BGN to NH	
ay 5 Sun 02/10	Outpatients Modules 1,2 & 3 & Radiology (OPD Provision)				Urology OPD from BGN to NH		
Day 6 Mon 3/10	No Clinical Moves Trial outpatient pathways including radiology						
Day 7 Tue 4/10	Open New Hospital OPD St Paul's Clinics,	Day:	Area:	100	C1	Other Moves	Site Moves:
0ay 8 Wed /10	St Paul's Clinics,	Day 13 Mon 10/10	Wards 7D,7A, CRF, C	ardio Respiratory Unit, 1 Gen	eral		
Day 9 Thur 1/10	St Paul's Clinics, Breast Unit	Day 14 Tue 11/10	Wards 6D, 6C, 1 Gene	eral Theatre			Vascular to Aintree
Day 10 Fri 7/10	St Paul's Clinics, Breast Unit	Day 15 Wed 12/10	Wards 8D, 8B, 8C, 1 0	General Theatre			
Day 11 Sat 08/10	Snagging – No Clinical Moves	Day 16 Thur 13/10	8A, 4D, 4A, Endoscop	y (4B), 1 St Paul's Theatre			
Day 12 Sun	No Moves	Day 17 Fri 14/10	Endoscopy (4B), 1 St				
09/10	no meros	Day 18 Sat 15/10	Ward 7B (Nephrology) 1 IR Theatre, 1 St Pau				Nephrology from Aintree
		Day 19 Sun 16/10	Endoscopy (4B) Nephrology Dialysis U	nit			
		Day 20 Mon 17/10	6A, 6B, 5B, 2 General	Theatres, 1 St Paul's Theatre	е		Urology from Aintree
		Day 21 Tue 18/10	5D, 5A, 5C, 7B, Same 2 General Theatres	Day Admissions,		Chapel	Liver & Colorectal from Aintree
		Day 22 Wed 19/10	ITU, HDU & POCCU, FAU, NIV, ED, ACU, A 2 General Theatres,	MU, ESAU			
		Day 23 Thur 20/10	ED, AMU, 2 General Theatres 1 IR Theatre				
		Day 24 Fri 21/10		ALL MOVES COMPLETE			

October 2022







LIVING OUR VALUES











SPEAKING NOW



Mark Songhurst

Programme Lead - Scan4Safety Leeds Teaching Hospital NHS Trust

I will be discussing...

"Transforming patient care through effective location management"





Q&A PANEL



Paul Fitzpatrick

Director of Estates & Facilities
- Liverpool University Hospital
NHS FT



Phil Shaw

Divisional Director Tilbury Douglas



Wayne Youmans

Sales Director - OSS Algeco UK Ltd



Mark Songhurst

Programme Lead Scan4Safety
Leeds Teaching Hospitals NHS
Trust





Delivering Net Zero Panel Debate



Séverine Turgis

Sustainability Manager North West London ICS



Tim Radcliffe

Net Zero Food Programme Manager NHS England



Fiona O'Mahony

Sustainability Programme
Manager
Cambridgeshire &
Peterborough ICS



Andrew Urquhart

Sustainability Lead
Suffolk & North East Essex ICB



THANKS FOR ATTENDING



The NHS Estates & Facilities Conference 2023



REGISTER FOR THE NEXT **NHS ESTATES & FACILITIES** CONFERENCE HERE!



