

**UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST**  
**BOARD OF DIRECTORS**  
**THURSDAY 23 JULY 2020**

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| <b>Title:</b>                | <b>SUSTAINABILITY UPDATE</b>                            |
| <b>Responsible Director:</b> | <b>Tim Jones, Chief Innovation Officer</b>              |
| <b>Contact:</b>              | <b>Phillippa Hentsch, Head of Strategy and Analysis</b> |

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| <b>Purpose:</b>   | To present an update to the BOARD OF DIRECTORS on the Trust's sustainability strategy   |
| <b>Confidentiality Level &amp; Reason:</b>                                | None  |
| <b>Board Assurance Framework Ref: / Strategy Implementation Plan Ref:</b> | SIP - #8 Use our resources as efficiently as possible<br>SIP - #10 Transform the model of care to ensure patients are seen in the right settings and to move lower acuity care off acute/specialist sites   |
| <b>Key Issues Summary:</b>  | <ul style="list-style-type: none"> <li>• In October 2019 the Board approved the Trust's new five year sustainability strategy (officially the Trust's Green Plan).</li> <li>• All providers are required to have a Board approved Green Plan. It is a requirement in the NHS Standard Contract and NHSE/I view it as a measure of a well led organisation.</li> <li>• This is the first update to the Board on key progress achieved against the priorities set in the strategy. We anticipate providing twice yearly updates to the Board for the duration of the strategy to ensure that implementation is on track.</li> </ul> |
| <b>Recommendations:</b>   | The BOARD OF DIRECTORS is asked to:<br>Receive the update on the Trust's progress in implementing the Trust's sustainability strategy.  |

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| <b>Signed:</b> Tim Jones | <b>Date:</b> 15 JULY 2020 |
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# UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST

## BOARD OF DIRECTORS

THURSDAY 23 JULY 2020

## SUSTAINABILITY UPDATE

**TIM JONES (CHIEF INNOVATION OFFICER)**

### 1. Introduction

In October 2019, the Board approved the Trust's new five year Sustainability Strategy. Formally, this is the Trust's Green Plan (also known as the Sustainable Development Management Plan (SDMP)), which is required under the NHS Standard Contract.

Above and beyond the environmental obligations we have as a public organisation, the sustainability strategy aims to reinforce many of the Trust's key corporate priorities, such as the Digital First agenda, outpatient transformation, our ambition to deliver more care in the community and virtually, and the financial improvement programme.

Although the public launch of the strategy (due in March 2020 to coincide with NHS Sustainability Day) was delayed due to COVID-19, corporate and operational teams have already started to progress the implementation of initiatives within the six priority areas identified in the strategy:



We anticipate providing twice yearly updates for the duration of the strategy to ensure the Board has oversight over its implementation. This first update provides a particular focus on sustainability initiatives in response to the first phase of our Covid-19 pandemic response.

The pandemic is fundamentally changing how we will deliver health and care services, with important implications on our environmental sustainability. As we work to reset the way we provide services in response to the pandemic, we have a unique opportunity to provide our patients, staff and wider community with services which contribute to a green and sustainable environment, in turn accelerating implementation of our strategy.

## 2. Background

### 2.1 Overview of the local context

As highlighted in the Trust’s sustainability strategy, there are a number of significant achievements we are building on across our key functions (figure 1).



**Figure 1: UHB’s key sustainability achievements**

The Trust’s latest carbon, energy and waste performance for the year 2019/20 is captured in table 1.

| Area                    | Update for 2019/20  |
|-------------------------|---|
| <b>Carbon footprint</b> | <ul style="list-style-type: none"> <li>• Absolute emissions resulting from energy consumption (scope 1 and 2) for 2019/20 were estimated to be 45,460 CO<sub>2e</sub>. This equates to an 18% reduction versus 2015/16.</li> <li>• The most significant drivers behind these carbon reductions has been the on-going decarbonisation of the national grid and efficiencies sought through initiatives such retrofitting LED lighting, variable speed drives, Building Management System (BMS) upgrades and on-going on-site solar PV generation.</li> </ul> |

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| <b>Energy consumption</b>       | <ul style="list-style-type: none"> <li>• Energy consumption across UHB has remained similar to previous reporting years. QEHB continued to operate within the Department of Health's energy efficiency upper limit, consuming 51.88 GJ/100m<sup>3</sup> against a target range of 35-55GJ/100m<sup>3</sup>. Despite improvements at Solihull and Good Hope, the two sites along with Heartlands are operating outside of the efficiency target of 55-65 GJ /100 m<sup>3</sup> for existing buildings. We are working with our energy partners to address this.</li> </ul> |
| <b>Waste recycling</b>          | <ul style="list-style-type: none"> <li>• The Trust continues to yield in excess of 1,300 tonnes of re-useable and recyclable material per year.</li> <li>• For all UHB sites the volume of recyclable waste has remained comparable with 2019/20. The introduction of additional mixed recycling bins into public areas on the Queen Elizabeth Hospital site was completed in autumn 2019 (Phase 3). A final Phase 4 programme is scheduled for 2020 for outlying off-site locations. This will further support the on-going promotion of waste recycling.</li> </ul>     |
| <b>Travel and air pollution</b> | <ul style="list-style-type: none"> <li>• We do not currently measure the carbon footprint from travel and transport. We currently carry out a travel survey every other year (the last one being in 2018).</li> <li>• During December 2019, we partnered with the British Lung Foundation to carry out some preliminary air quality monitoring (NO<sub>2</sub>) outside QEHB and Heartlands Hospital. Although there is no safe level of air pollution, both entrances were above the level annual mean NO<sub>2</sub> set by the WHO.</li> </ul>                         |

## 2.2 Overview of the national context

In January 2020, the NHS launched the 'For a greener NHS' campaign, a programme to support the implementation of the Long Term Plan's ambitions for a more sustainable NHS. It aims to encourage sharing ideas on how to reduce the impact on public health and the environment, save money and support the NHS to achieve net carbon zero.

A new expert panel has been set up to support this ambitious transition and to determine how and when the NHS can reach net zero.

The draft standard contract for 2020/21 mandated that all healthcare services have a Green Plan in place, and introduced a number of additional requirements on providers around improving air pollution and their environmental footprint. Some of the key requirements include:

- Take action to reduce air pollution from fleet vehicles, transitioning as quickly as reasonably practicable to the exclusive use of low and ultra-low emission vehicles;
- Take action to phase out oil and coal for primary heating and replace them with less polluting alternatives;

- Develop and operate expenses policies for Staff which promote sustainable travel choices;
- Ensure that any car leasing schemes restrict high-emission vehicles;
- Reduce the impacts from the use, or atmospheric release, of environmentally damaging fluorinated gases used as anaesthetic agents and as propellants in inhalers
- Remove all single use plastic straws and stirrers unless there is a clinical need, in line with national regulations, and observing the NHS Plastics Pledge to reduce all single use plastic products.
- Maximize the rate of return of walking aids for re-use or recycling, and must implement those plans diligently.

### 3. Progress against the strategy

Our sustainability objectives, as outlined in our strategy are to:

- Maximise the benefits of being one of the largest Trusts to significantly influence social and environmental issues for Birmingham, Solihull and South Staffordshire.
- Redesign healthcare in a way which supports the development and delivery of a more integrated and sustainable model of care
- Empower our staff to put sustainable and environmental issues at the heart of their work, giving them the necessary tools, resources and training to make responsible decisions.
- Measure and report on the Trust’s progress against statutory targets.
- Manage our buildings and resources in the most effective way to minimise our environmental impact.
- Work in partnership with other local government and NHS organisations through the Birmingham and Solihull sustainability and transformation partnership (STP) and voluntary sector to deliver shared sustainability objectives.

Since the adoption of the strategy, we have developed a detailed action plan which will form the basis of our reporting to Board in future. Recent progress against our priority areas is outlined in table 2.

**Table 2: overview of key actions taken since the adoption of the Trust’s sustainability strategy**

| Estates, Assets and Utilities   | Travel and Transport  | Waste  |
|---|---|--|
| <ul style="list-style-type: none"> <li>• Moved to Green Contracts across all ours sites from 1 April 2020</li> <li>• Across Heartlands, Good Hope and Solihull hospitals engagement with</li> </ul> | <ul style="list-style-type: none"> <li>• Supported up to 1,800 staff to work from home each day in the first phase of the pandemic which, from April-June, could have saved up to 2 million miles, the equivalent of</li> </ul> | <ul style="list-style-type: none"> <li>• A five-year waste strategy has been developed, which supports sustainable procurement and a waste prevention plan.</li> <li>• The Trust is currently out to tender for</li> </ul> |

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| <p>Energy Performance Contract partners remains a key focus for improving energy efficiency.</p> <ul style="list-style-type: none"> <li>• The ACAD development is still working towards BREEAM Excellent.</li> <li>• Working in collaboration with the ACAD project team to explore a range of opportunities for further heat utilisation from the Heartlands Energy Centre have begun to be explored and should be finalised within the coming financial year.</li> </ul> | <p>557 tonnes of CO<sub>2</sub> saved<sup>1</sup>. The Trust continues to support home working, and is looking at how to support more staff work from home in future.</p> <ul style="list-style-type: none"> <li>• Widespread adoption of video conferencing software (Vidyo and subsequently Microsoft teams) to reduce inter-site travel.</li> <li>• Adoption of Digital First Education programme, moving to on-line delivery and development of the Moodle Platform, including Trust induction and mandatory training.</li> <li>• Partnering with the University of Birmingham to measure the air quality (NO<sub>2</sub> and PM) for the next year at QEHB and Heartlands hospital sites.</li> <li>• Investing in our cycle infrastructure, upgrading our secure cycle facilities across our four sites.</li> <li>• Established a task and finish group looking at ways to support a modal shift towards more active travel.</li> <li>• Since the start of the pandemic, the Trust received a number of donations to support our staff travel to work more sustainably. For example, Halfords donated 72 bikes to staff and we hosted bike surgeries (Dr Bike) across our sites to offer free bike maintenance.</li> </ul> | <p>commercial waste (domestic and recycling) with award scheduled for autumn 2020. This service will incorporate a fully integrated waste minimisation and recycling programme across all UHB sites with an emphasis on zero waste to landfill as our key objective underpinning our approach.</p> <ul style="list-style-type: none"> <li>• Signed up to the NHS Plastics Pledge, committing to reduce the Trust's single use plastics.</li> <li>• Moved to electronic payslips for the vast majority of staff. This has reduced the number of paper payslips from around 36,000 a month in April to around 5,000 a month as at June 2020. This is the equivalent to saving 1.8 tonnes of paper a year.</li> <li>• New printing strategy to review management of printers across the Trust, with the aim of reducing reliance on paper systems.</li> </ul> |
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<sup>1</sup> This uses calculations from the Health Outcomes Travel Tool (HOTT), and it assumes that all these staff would have travelled to work by car rather than public transport. It assumes the average daily staff commute to UHB is 16.6 miles.

|   | <ul style="list-style-type: none"> <li>Scoping out an e-bike/scooter trial between Regents Court and QEHB.</li> <li>Starting to upgrade our fleet to hybrid vehicles and continue to explore electric options where available.</li> </ul> |   |
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| <b>Goods and Supplies</b>   | <b>Green Spaces and Biodiversity</b>  | <b>Sustainable Clinical Pathways</b>  |
| <ul style="list-style-type: none"> <li>Supporting local manufacturers and local supply chains with the sourcing and production of PPE over the pandemic.</li> <li>Sourced locally manufactured protective visors and non sterile surgical gowns. We are now looking in to working with local suppliers to sterilise gowns and to source aprons, theatre hats, surgical face masks and gloves.</li> <li>Continue to review how to improve sustainability in the supply chain in response to the pandemic.</li> </ul> | <ul style="list-style-type: none"> <li>No specific updates to note.</li> </ul>  | <ul style="list-style-type: none"> <li>Supported a substantial amount of virtual outpatient consultations since the start of the pandemic. For QEHB, there were over 51,500 telephone or video consultations between April and June 2020, which could have saved over 1 million miles in patient journeys, the equivalent of 325 tonnes of CO<sub>2</sub>.<sup>2</sup></li> <li>We are continuing our green anaesthetic programme, reducing the proportion of desflurane and sevofluane used in surgery.</li> </ul> |
| <p>Key partnerships the Trust continues to engage in:</p> <ul style="list-style-type: none"> <li>Shelford Group sustainability leads</li> <li>National Performance Advisory Group</li> <li>Birmingham City Council's route to zero taskforce</li> <li>West Midlands Air Quality Improvement Programme</li> </ul>  |   |   |

#### 4. Future priority areas

The Trust's sustainability group, which brings together relevant corporate teams with key staff champions across the Trust, remains an important forum for discussing and prioritising actions.

The table below outlines key elements of our current approach to environmental sustainability and illustrative initiatives we could further develop in future in line with the strategy, subject to sufficient resources and financial due diligence.

<sup>2</sup> We do not have this data for Heartlands, Good Hope and Solihull. This uses calculations from the Health Outcomes Travel Tool (HOTT), and it assumes that all these patients would have travelled to work by car rather than public transport. It assumes an average patient travels 23.7 miles for a return journey.

| <p style="text-align: center;"><b>Our current environmental sustainability work</b><br/><i>Non exhaustive list</i></p>   | <p style="text-align: center;"><b>Potential future activities</b><br/><i>Non exhaustive list</i></p>   |
|--|--|
| <ul style="list-style-type: none"> <li>• Meeting our regulatory requirements e.g. adopt an SDMP</li> <li>• Mandatory reporting e.g. ERIC submissions</li> <li>• Staff shuttles between sites, including a car sharing scheme.</li> <li>• Compliance with relevant audits</li> <li>• Provision of recycling facilities, including recycling bin replacement programme</li> <li>• Installation LED lighting where feasible</li> <li>• Charity funding for some initiatives e.g. green spaces and bike sheds/cages</li> <li>• Reducing our single use plastics in targeted areas e.g. catering outlets.</li> <li>• Sharing and exchanging initiatives between other NHS Trusts e.g. by attending meetings with environmental sustainability leads.</li> <li>• Informal sustainability working group, who meet to discuss small scale projects.</li> <li>• Video conferencing platform, to support remote consultations and virtual meetings.</li> </ul> | <ul style="list-style-type: none"> <li>• Clinical engagement programme to support targeted waste reduction and carbon reduction in key areas e.g. awareness raising, hot-spot audits, carbon footprint information</li> <li>• Staff engagement / behavioural change programmes e.g. green ward/theatre competitions, regular communications/newsletters</li> <li>• Actively monitoring annual performance against our sustainable development management plan, including review against the sustainable development assessment tool and Clean Air Framework<sup>3</sup> which many Trusts do.</li> <li>• Support staff and patients to increase active travel and use of public transport e.g. additional incentives to alternatives to car travel e.g. cycle surgeries, cycle breakfasts, electric bikes, journey planning tools</li> <li>• Identification of options for green spaces across all our sites / promote and raise awareness for staff and patients</li> <li>• Expand scope of our travel survey, to include all sites (currently only at QEHB); capture information from patients about how they are travelling to our sites.</li> <li>• Installation of electric car charging points across our sites</li> <li>• Investment in University Station to support clean public transport to QEHB</li> </ul> |

There is potential for the Trust to improve the pace and scale of its sustainability activities. Through comparisons we have undertaken with other Shelford Group trusts, there is an opportunity for us to deliver a more comprehensive sustainability programme, in particular around sustainable travel and staff engagement. For us to fully embed sustainability at the heart of the organisation, we have to embed a culture of “reuse and recycle” (where

<sup>3</sup> The Clean Air Framework has been co-developed by Global Action Plan and Great Ormond Street Hospital.

appropriate) across all our operations, enabling and empowering clinical and corporate teams to take action locally.

## **7. Recommendations**

It is proposed that the Board notes the update on our progress in implementing the Trust's sustainability strategy.

**Tim Jones**  
**Chief Innovation Officer**  
**15 July 2020**

