



The Newcastle upon Tyne Hospitals
NHS Foundation Trust

Sustainable Healthcare in Newcastle

Sustainable Healthcare in Newcastle (SHINE) Report 2018-19



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Thanks to young people like Greta Thunberg, the 16-year old Swedish school girl who recently spoke to world leaders at the World Economic Forum, and the Extinction Rebellion movement, it feels like more of the world has woken up to the threats of climate change on our planet, and on our health. It's widely accepted that humans have already caused irreversible heating of the earth, and there is an increasing realisation that the changes which Governments have committed to in the past will not be enough to halt this crisis.

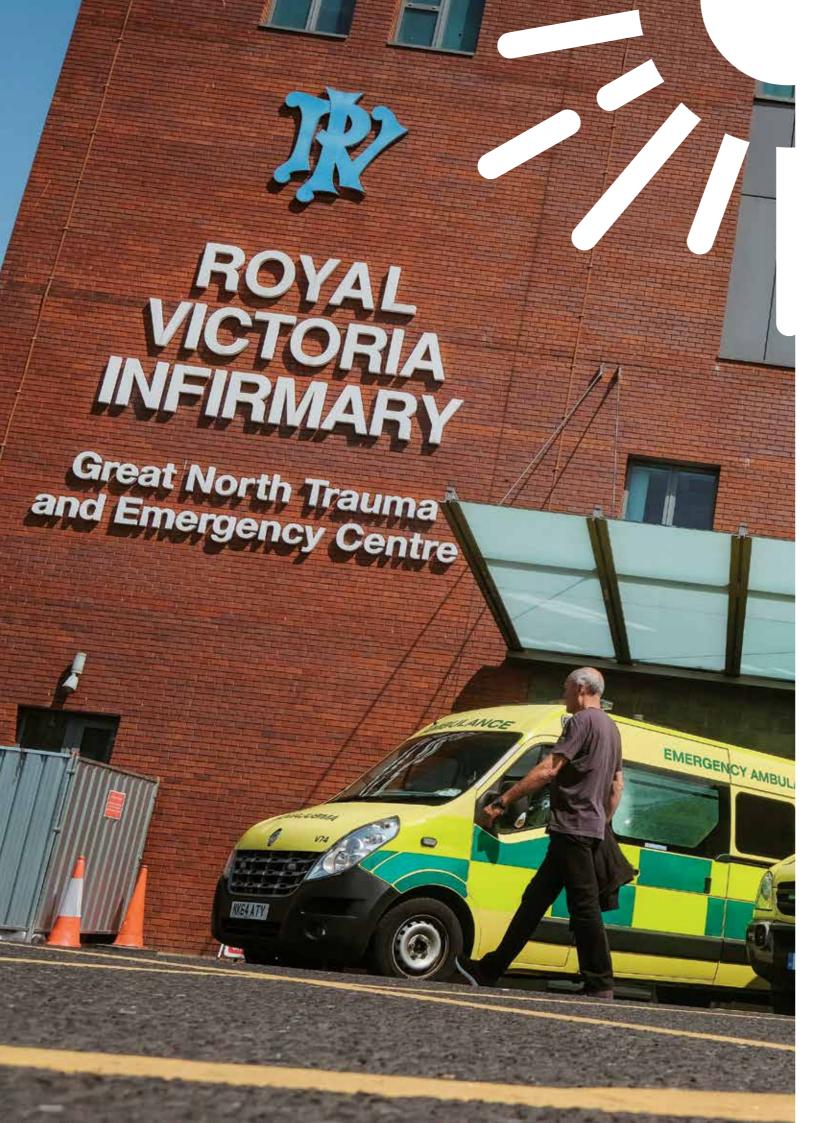
This year public organisations around the world have responded with more ambitious targets and I'm delighted to say that, in June 2019, the Board agreed that we should declare a climate emergency and fast-track our carbon reduction efforts, becoming the first NHS Trust in the country to do so. We are joining with our civic partners in the City Council and Newcastle University in committing to take joint action about our organisations' impact on the world.

One of the reasons the Board agreed to commit to publicly declaring a climate emergency, and leading on environmental sustainable healthcare, is the confidence we have in our own Sustainability Team. Supported by our network of Green Champions, the team have worked hard over several years to embed the principles of sustainability across the trust.

So I'm delighted to present our Sustainable Healthcare in Newcastle (Shine) Report 2018/19, which outlines how we have performed in each of our sustainability priority areas and our future plans for achieving our Sustainable Healthcare Strategy. As you read this report I hope that you will also think about what you can do to make a personal impact on this global problem. From cycling into work, or taking advantage of our discounted public transport passes, to using reusable cups and segregating our waste correctly everyone can contribute. Please join us in making Newcastle Hospitals the most sustainable healthcare organisation in the NHS.

If you would like to hear more about our work to deliver sustainable outstanding healthcare services, both now and into the future, please get in touch with the team via email (environment@nuth.nhs.uk) or Twitter @SustainableNUTH.

Dame Jackie Daniel
Chief Executive Officer
The Newcastle upon Tyne
Hospitals NHS Foundation Trust



2. Introduction

Since the publication of the last Annual Sustainability Report for The Newcastle upon Tyne Hospitals Foundation Trust (2017-18) there has been a noticeable increase in the level of concern from staff, patients and visitors about the impact of Trust activities on the natural world.

The BBC documentary Blue Planet Il continues to have an affect with numerous Trust employees making contact to express their concern about the impact that single-use plastics are having on the environment and marine ecosystems. The publication of the updated United Nation's Intergovernmental Panel on Climate Change (IPCC) report stated that we have just 11 years for global warming to be kept within safe limits and this has heightened awareness of the need to accelerate action in order to avoid runaway climate breakdown. And the launch of the NHS Long Term Plan included sustainability commitments to reduce waste, water and carbon as well as improving air quality.

This increased awareness has been noticed in the number, and type, of enquiries received in to the Trust's environment@nuth.nhs.uk inbox, with more and more members of staff expressing a desire for the Trust to work towards reducing harm for this and future generations.

This desire aligns perfectly with the Trust's vision for sustainability, set out in our Board-approved Sustainable Healthcare Strategy (2016-20), which is to deliver healthcare at its very best, within the available environmental and social resources, protecting and improving health now and for future generations.

The strategy is supported by a Sustainable Development Management Plan – an action plan setting out how the key aims of the strategy will be achieved – and progress towards these actions is monitored by the Trust's Sustainable Healthcare Committee. This is a multi-disciplinary committee chaired by Non-Executive Director with responsibility for Sustainability, Mr. Keith Godfrey.

The Trust's previous two annual Sustainable Healthcare in Newcastle (SHINE) Reports were published for 2016/17 and 2017/18 and demonstrated the progress of the Trust towards the key aims of the strategy. This year's report provides an update on our overall performance, using key performance data and historical trends, followed by detailed progress reports for each of our key action areas.

We hope this helps to highlight where we have successfully reduced our impact on the environment, saved money and improved patient and staff wellbeing, whilst facing ever tighter financial constraints and increasing patient numbers.

We've also continued to use our Shine logo and brand in all communications this year, and it was encouraging to see an improvement in the level of staff awareness of sustainability, and the work of the Trust Sustainability Team, when we conducted the annual staff survey in summer 2018 (see Section 3.3).

How we plan to deliver sustainable healthcare at its very best



Energy

Using energy more efficiently and transitioning to lower carbon energy sources



Waste

Moving up the waste hierarchy: dispose of less, reuse and recycle more



Water

Eliminating wasteful use of this precious resource



Buildings & Land

Providing healthy and biodiverse spaces for patient and staff wellbeing



Journeys







People

Inspiring, empowering and motivating our people to embrace sustainable healthcare

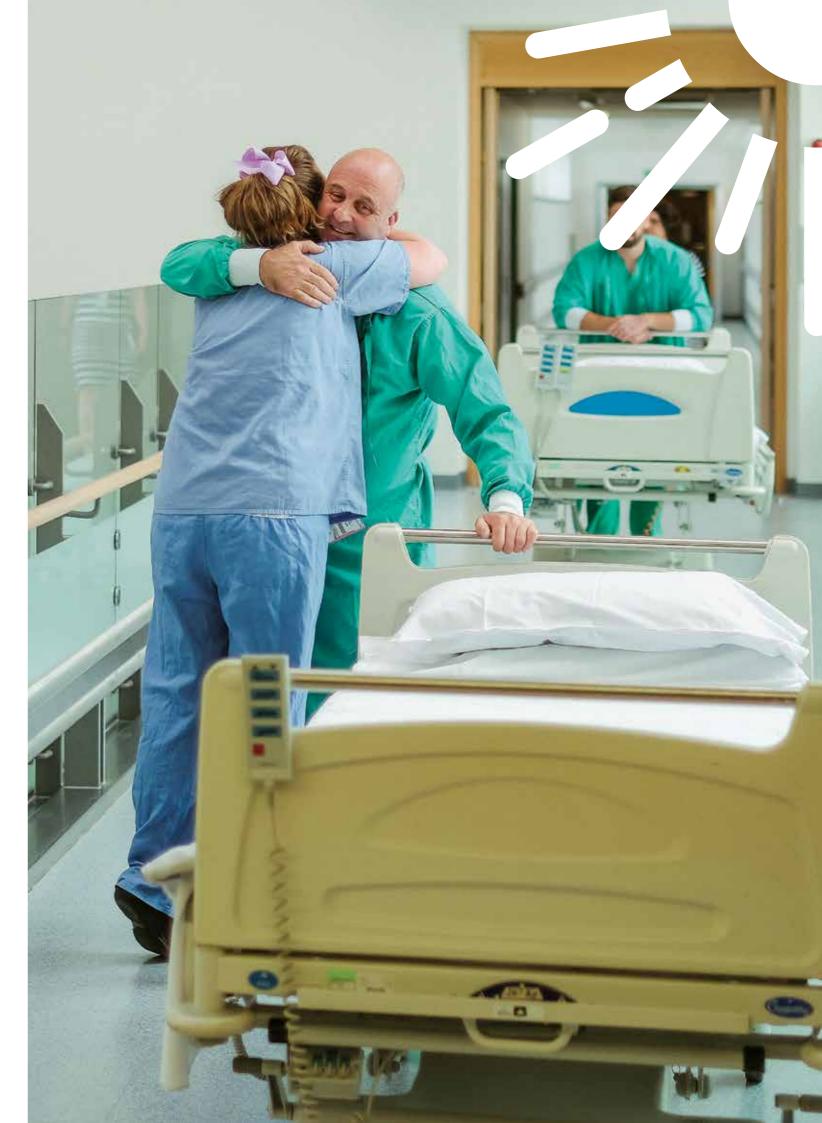


Purchasing

Encouraging active and Working with our sustainable travel for all supply chain to deliver ethical and sustainable procurement



Developing low carbon care pathways and adapting our services with climate change in mind



3. Overall Performance **Update**

3.1 Sustainable Development Assessment Tool (SDAT)

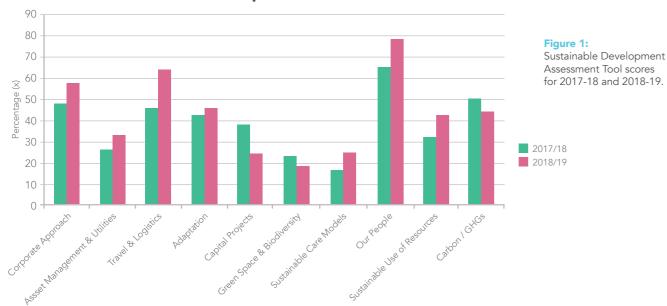
The Sustainable Development Assessment Tool (SDAT) (previously the Good Corporate Citizen (GCC) Assessment Tool) is a selfassessment tool developed by the Sustainable Development Unit (SDU) to help healthcare organisations understand their sustainable development work, measure progress and help to plan for the future.

The tool assesses our performance in 10 modules and generates an overall percentage score as well as a score for each module. The SDU encourages all users of the tool to include both scores within their annual report.

Having completed the new SDAT tool when it replaced GCC in 2017-18, we can now start to see where

we are making progress and where more effort needs to be concentrated. Our baseline SDAT score was 41% and there has been a small increase to 46% in 2018-19. Most areas have seen an improvement in their SDAT score; however there has been a fall in the 'Capital Projects', 'Green Space & Biodiversity' and 'Carbon / GHGs' sections (Figure 1).

Sustainable Development Assessment Tool Scores



The SDAT tool also shows how the Trust is supporting progress against the UN Sustainable Development Goals (SDGs) – 17 sustainable development goals which aim to end poverty, protect the planet, and bring prosperity to all by 2030. The relevant SDGs will be highlighted throughout the report in each key action area.

Based on this year's SDAT submission, the Trust is contributing to these SDGs at a local level:













And the Trust is starting to contribute to these SDGs at a local level:













Figure 2:

Trust carbon emissions since 2013-14, including

relative carbon intensity

based on the number of patient contacts

3.2 Carbon Footprint

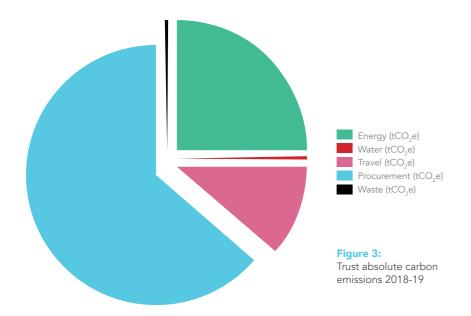
Trust Carbon Emissions (showing 2020 target)



Again the figures show a very slight decrease in the overall carbon emissions, once again with increased number of patient contacts and associated activities. The level of emissions per patient contact (carbon intensity (kgCO₂ per patient contact) shown by the black line on the graph) has decreased showing that our interventions are having a positive effect on the impact of Trust activity.

The Carbon Footprint graph (figure 2) shows the carbon emissions associated with our Building Energy use, Water use, Waste, Travel and Procurement (supply chain) emissions.

Trust Absolute Carbon Emissions (2018/19)



The breakdown of the Trust's total emissions for 2018-19 (figure 3) clearly shows that emissions from Procurement make up the greatest proportion of our total emissions, followed by Building Energy and then Travel. Waste and Water Consumption related emissions make up a very small proportion of the whole.

In order to meet the 2020 target significant reductions in energy consumption and carbon related to travel and procurement will be needed.

The sections in this report will highlight how we expect to work towards that goal in 2019/20.

The first priority for the Trust is to invest in spend-to-save projects that will continue to achieve reductions in energy demand, year on year, whilst also increasing the amount of self-generated renewable energy.

Longer term there will be an opportunity to take advantage of the decarbonisation of grid electricity. The amount of electricity generated from renewable sources

has increased dramatically in recent years and will continue to do so. At the moment the Trust is committed to gas-fired CHP engines to efficiently generate electricity, heating and hot water for the RVI and Freeman sites until 2028. At this point we will have an opportunity to invest in other means of powering and heating our hospitals and ensure that carbon emission reduction/elimination is a priority.

Since 2014 the Trust has produced an annual staff sustainability survey to gather feedback from staff on their understanding of sustainability aims and objectives at Newcastle Hospitals. In the most recent survey, over 87% of staff agree that it is 'very important' for the Trust to work in a more sustainable way; this is the highest percentage of staff responding so strongly to the question in the five years we have asked the question.

The survey also showed that the majority of staff believes the Trust should act in a more sustainable way, even where this would cost a small amount, with 21% believing it should be our top priority.

Since 2016 awareness amongst staff on the sustainability work of the Trust has increased from 47% of staff to 69%

with a jump of 16% in the last year (figure 4). This follows the launch of the Shine (Sustainable Healthcare in Newcastle) sustainability brand and an increase in the number of engagement events and communications over the last year using that consistent style. This is a real success for the Sustainability Team, demonstrating that awareness of our strategy, and what staff can do to support it, is on the increase.

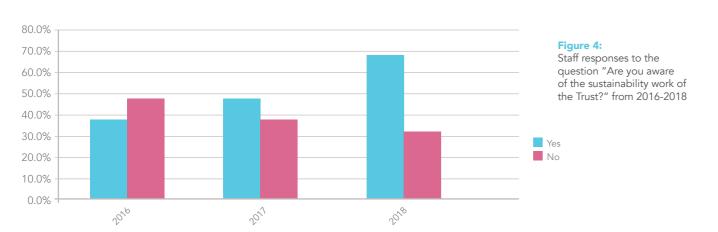
In addition to our regular monitoring questions, our survey also asks an open ended question around a topical theme each year. This year's survey was used as an opportunity to ask where staff had reduced single-use plastics in their area, and for their suggestions about where we could further reduce singleuse plastics across the Trust. The word cloud (figure 5) is a visual representation of the answers to this question. Some common themes were identified from the answers; catering disposables, refillable water bottles and greater staff education. We were particularly impressed with the winning suggestion to have multidisciplinary audits of the singleuse plastics used in each ward and department to identify items which could be removed or changed, and where to focus in order to have the greatest impact. We have now made this a priority for us in 2019/20.



Figure 5: word cloud of responses to the final staff sustainability survey question

3.3 Staff Sustainability Survey

Are you aware of the sustainability work of the Trust?



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4. Key Action Areas



4.1 Energy

PERFORMANCE

SUSTAINABLE DEVELOPMENT ASSESSMENT TOOL

The Trust achieved a baseline score of 26% on the SDAT theme of Asset Management & Utilities in 2017-18; this has increased to 32% this year. The baseline score of 50% on the theme of Carbon/Greenhouse Gases has decreased to 43% this year following a re-evaluation of some actions we feel we still have work to do to order to fully achieve them. We are clearly contributing to the following UN Sustainable Development Goal at a local level:



And starting to contribute to the following Sustainable Development Goal at a local level:

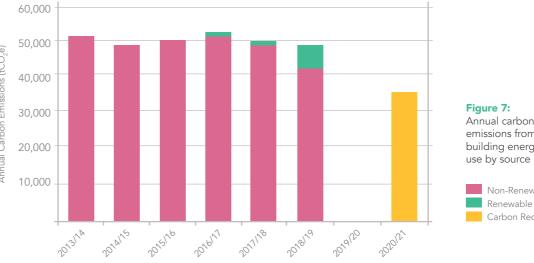


Year	Imported Natural Gas (kWh)	Imported Oil (kWh)	Imported Brown Electricity (kWh)	Imported Green Electricity (kWh)	Exported Electricity (kWh)	Overall Carbon Emissions (tCO ₂ e)
2013/14	256,661,771	560,443	14,690,626	-	8,072,236	50,335
2014/15	269,476,845	734,716	10,181,446	-	11,913,094	49,188
2015/16	263,081,262	1,041,271	12,135,292	-	9,559,200	49,996
2016/17	279,013,869	1,420,945	7,967,821	1,651,882	11,196,312	51,060
2017/18	263,204,645	801,388	12,015,477	4,091,269	6,265,123	50,067
2018/19	222,360,639	1,283,611	-	27,375,236	7,924,503	48,577

Figure 6: Annual energy use in buildings and associated

carbon emissions

Carbon Emissions from Building Energy Use



Non-Renewable Sources Renewable Sources Carbon Reduction Target

Carbon emissions from building energy use have reduced by 3% between 2017/18 and 2018/19.

Demand for heat and power across our estate has remained consistent with previous years so this carbon saving is largely attributable to the decarbonisation of grid electricity. Carbon intensity of grid electricity has reduced by a further 19% in the last year, with every kWh of electricity used today emitting 36% less carbon than it did in 2013/14. Whilst the majority of our electricity is generated on site, 2018/19 saw

the upgrade of our combined heat and power (CHP) engines at the RVI. Whilst the new engines were being installed, the RVI was powered by grid electricity, benefitting from the decarbonisation more than usual. See case study below for more information.

Since October 2016, the Trust has purchased grid electricity from renewable sources for all supplies other than the Energy Centres. However, from April 2018 all purchased grid electricity supplies moved to a green tariff. Figure 7 shows the step change in our emissions from renewable sources.

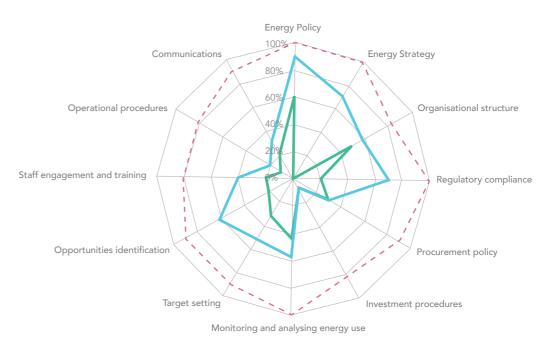
Actions and Achievements

2018/19 saw the expansion of the Sustainability Team with the appointment of two Energy Support Officers. These newly created roles will play a key part in improving energy management across the Trust, helping to embed best practice and drive further carbon and cost savings from building energy use.



Figure 8: NuTH Energy Management Team. (L-R: James Duffy, Thomas Wright and Cara Tabaku)

Energy Management Assessment



The Energy and Water Management Group continues to track progress towards embedding energy management best practice throughout the Trust, based on criteria set out in the Carbon Trust's Energy Management Assessment tool.

Figure 9: Energy Management Assessment progress and target.

2016/17 - Baseline 2018/19 - Achieved 2019/20 - Target

From a baseline of 27% in 2016/17, an improved score of 48% was achieved in 2018/19 with significant progress in the areas of energy strategy, compliance and opportunities identification.

We have completed more energy audits in 2018/19 than ever before, identifying many opportunities to reduce energy demand. These include:

 Lighting audits across both our main hospital sites and buildings in the community.
 These identified huge potential to reduce electricity demand by installed LED lighting and improved lighting controls.

- A strategic heat audit at the RVI.
 This investigated how we use heat across our site and identified many options for us to better utilise the free heat from our Combined Heat and Power plant to reduce our demand for natural gas.
- Building-by-building audits, starting with the Claremont Wing at the RVI and Ward Block at the Freeman Hospital sites. These targeted energy audits help us develop a deeper understanding of where heat and power is used in each building and what drives this energy use.

Whilst audits in themselves do not deliver direct energy and carbon savings, they are a key way to better understand where short term and long term energy opportunities exist - to reduce costs, reduce carbon emissions and improve the internal environment for our patients and staff.

Partnership Working



The Energy Team maintains regular links with networks that share energy best practice. This includes the Northern and Yorkshire Environment and Energy Group for NHS Trusts and the Newcastle Sustainability Network which provides a forum for sharing innovations and strategies with our civic partners. Members of the Sustainability Team also attend the Women in Sustainability networking events that take place in Newcastle.

Plans for the future

We have ambitious plans for 2019/20, with particular focus around the themes of:

 Embedding utilities consideration into procurement, financial and operational processes across the Trust

Strengthening our management processes so that energy costs and associated carbon emissions are considered when decisions are made about designing, specifying and implements projects or responding to reactive maintenance requests.

 Building Management System (BMS) utilisation

The BMS controls most of the building systems in our buildings like boilers, ventilation systems and all the pumps and fans that work behind the scenes to provide a safe and comfortable internal environment for our patients and staff. The year ahead will see a concerted effort of the energy and engineering teams to optimise how we use this to deliver energy efficiency and maintenance improvements.

New Engines at the RVI Energy Centre

At the RVI, 90% of the electricity used in our buildings is generated onsite using Combined Heat and Power (CHP). We have two large engines within our Energy Centre that convert natural gas into electricity and generate heat as a by-product. Rather than wasting this heat, we use this onsite for space heating and hot water. This means we need to burn less natural gas in our boilers to meet our heating requirements.

As the original engines were installed in 2001 they were due for replacement, so between June and October 2018 a project to install new engines was completed. The new engines are more efficient, so the carbon emissions associated with each unit of electricity generated is now lower. This will deliver a carbon saving of over 800 tonnes each year (1.5% of our Trust total) compared to the old engines.

However, there is lots of progress being made to decarbonise the national electricity grid. Coal being phased out and replaced with more efficient gas-fired power stations and renewable sources now make up to half of grid-supplied electricity. The Trust benefitted from this lower carbon intensity during the four months that our CHP engines were being replaced, reducing our carbon emissions by around 2,250 tonnes in 2018/19 (see figures 6 & 7)





4.2 Water

PERFORMANCE

SUSTAINABLE DEVELOPMENT ASSESSMENT TOOL

The Trust achieved a baseline score of 26% on the SDAT theme of Asset Management & Utilities in 2017-18; this has increased to 32% this year.

We are clearly contributing to the following UN Sustainable Development Goal at a local level:



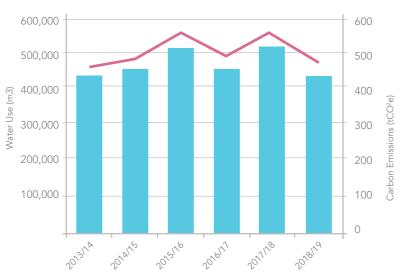
And starting to contribute to the following Sustainable Development Goal at a local level:

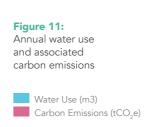


Year	Water Use (m3)	Carbon Emissions (tCO ₂ e)		
2013/14	431,693	454		
2014/15	457,611	481		
2015/16	509,960	537		
2016/17	458,037	482		
2017/18	523,620	551		
2018/19	440,812	464		

Figure 10: Annual water use and associated carbon emissions

Annual Water Use & Associated Carbon Emissions





Annual water use has fluctuated over the last few year, with a small increasing trend since 2013/14 overall (figures 10 & 11). As carbon conversion factors for water use and sewerage treatment have remained constant over the period, the annual

carbon emissions associated with Trust water use follow the same trend (figures 10 & 11). Data quality and granularity remains an issue for the Trust, so interpretation of figures is challenging.

Actions and Achievements

This year we have refreshed the Energy Policy, Energy Strategy and Energy Management Group to also incorporate water use management, providing a more robust management structure to help deliver our aim to increase the water efficiency of our estate. In practice, improvements in water management will mirror works on energy management, with progress already being made with audits and data collection, with water metering and data linking into the same software as energy.

Plans for the future

Our main focus for water management in the year ahead is improving metering and how data is collected and used to identify reduction opportunities.

This includes expanding our water (and energy) metering so that we understand how much is used by each building at different times of day, and collecting this data automatically to feed into our energy management software for analysis and reporting. This insight will allow us to target our efforts to reduce water (and energy) waste by identifying any increasing trends or unusual patterns of use that could indicate a leak or other fault.

It will also become a key tool in quantifying the impact of any water and energy interventions we take to reduce consumption.

We will also continue to work in collaboration with colleagues responsible for managing water quality, reviewing flushing procedures and identifying more innovative solutions to ensure we meet our water safety standards whilst reducing overall use. This could include trialling waterless urinals and new water saving outlets such as toilets and showers. We also hope to integrate water use considerations when designing, specifying and implementing relevant projects or responding to reactive maintenance requests that affect overall water use.



4.3 Waste

PERFORMANCE

SUSTAINABLE DEVELOPMENT ASSESSMENT TOOL

The Trust achieved a baseline score of 31% on the SDAT theme of Sustainable Use of Resources in 2017-18, which has increased to 40% in 2018-19. With continued progress we can start to show a contribution to these SDGs at a local level:













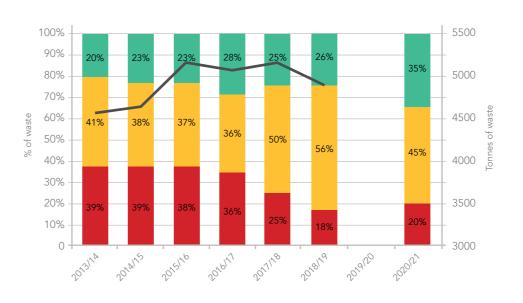


Figure 12: Segregation of clinical and nonclinical waste since 2013, with the 2020 target.

Recycling & Re-use
Energy Recovery
Hazardous
Tonnage

The loss of the Trust's clinical waste service provider (affecting most of the north of England and all of Scotland) in December 2018 placed considerable pressure to find alternative outlets for our various healthcare waste streams. One positive outcome of the situation was that implementation of the noninfectious (tiger-bag) waste stream was completed ahead of schedule and we are now consigning 60% of our healthcare waste as not infectious (thus reducing the environmental and financial cost of treating waste that was previously consigned as hazardous).

The recycling rate for non-clinical waste was 43.5% in the last year.

This continues to be achieved against challenging circumstances within the waste industry. Changes to quality criteria for waste imports to China and other countries, introduced in 2018, placed a great deal of pressure on the global waste industry to meet exacting standards. This placed a greater emphasis upon accurate segregation of non-clinical waste within our hospitals.

The Trust is working both internally and with contractors to ensure the best possible outcome for our waste is achieved in line with Waste Hierarchy requirements.



Actions and Achievements

Targeted awareness training, the rollout of the non-infectious waste stream and the continuing increase in recycling opportunities across the Trust have helped maintain a focus on waste segregation in all areas.

The implementation of the non-infectious (tiger-bag) healthcare waste stream has now been completed two years ahead of schedule. Excellent collaboration between teams from Sustainability, Infection Prevention & Control, Facilities and Nurse leaders has led to 56% of hospital healthcare waste being classified as non-infectious in March 2019. This significantly reduces the environmental impact of disposing of this waste, whilst also generating valuable cost savings.

The Warp-It surplus furniture and equipment portal has achieved some very good results this year. In 2018-19 we have estimated that over £160,000 of efficiencies have been realised through savings on avoided procurement, waste disposal, administration time, transport and logistics.

In September the Sustainability
Team carried out the second annual
'Waste Awareness Week', taking
messages to staff around the
hospital on five themes: Sharpsmart
– the correct procedures and use;
Batteries – safe disposal; Picking
the Perfect Cup – encouraging
staff to make the most sustainable
choice; Bulky Items – the correct
disposal of; and the Cost of Waste –
demonstrating the difference in
cost to the Trust for the routes
for waste disposal.

Plans for the future

The emergency situation with clinical waste continues to focus minds at both a local and a national level and it is clear that a good deal of time will be devoted to managing the situation and securing a compliant, cost-effective and sustainable long-term solution.

It is expected that the Trust will be able to take further steps towards the recycling of more food waste from areas of the hospitals not currently included, for instance the Freeman Hospital catering department and franchise food outlet areas. This will move more waste up the Waste Hierarchy, reducing environmental impact whilst contributing to cost savings.

4.4 Buildings and Land

PERFORMANCE

SUSTAINABLE DEVELOPMENT ASSESSMENT TOOL

The Trust achieved a baseline score of 23% on the SDAT theme of 'Green Space and Biodiversity' in 2017-18 which has decreased to 19% as we no longer have the food accreditations we had last year. The baseline score of 38% on 'Capital Projects' has dropped to 24% as the process for designing specifications does not have standard sustainability criteria built into it, in favour of bespoke criteria which is identified on a scheme by scheme basis. With improvement we can start to show a contribution to these SDGs at a local level:



















Actions and Achievements

This year we agreed the sale of our Campus for Ageing and Vitality (former Newcastle General Hospital site) to Newcastle University.

This site rationalisation allows us to reduce the footprint of the Trust, whilst continuing to provide the number of services and level of care, in a more efficient way.

We have planted an additional 100 trees at our Freeman Hospital this year in partnership with NHS Forest. These trees are made up of a variety of species which will help increase biodiversity at the site.

We have set up a new Green Spaces Group, with members from a number of specialities across the Trust including physiotherapy, older people's medicine and renal. The group will be focused on improving green spaces at our sites for staff and patients, as well as promoting the green space we already have available for people to access. It is an exciting opportunity to get more of our care into the outdoors.

Plans for the future

One of the main projects the Green Spaces Group is focussing on is the creation of an edible wellbeing garden at Freeman Hospital with a dedicated dementia friendly section. A one hectare area. mostly consisting of grass lawn, at the Freeman Hospital has been identified and it is hoped that the project will be supported with a number of charitable funds. The Newcastle Hospitals Estates Strategy will be sent for Board approval this year. The Strategy sets out the plans for the Trust Estate over the next ten years, including new builds and major refurbishments. There will be many opportunities for improvements to the sustainability of our estate through these developments.

CASE STUDY: County Durham Furniture Help Scheme (CDFHS)

In July and October 2018 the Trust donated a significant volume of surplus furniture and household items that had been removed from one of our residential buildings and was considered no longer suitable for use elsewhere in the Trust.

CDFHS aims to provide individuals in need with low-cost, affordable items - primarily furniture, but including all types of household items. The scheme seeks to relieve poverty, in particular by the provision of furniture and household goods to people in need.

To support those in need, the scheme relies on the generosity and support of the local community. Newcastle Hospitals was able to support by donating cookers, fridges, sofas, bedroom furniture and kitchen equipment that was considered as surplus to requirement and not suitable for any future requirements. The furniture help scheme takes such items and reconditions them for reuse.

CDFHS collect free of charge and repair and redistribute items from the County Durham area which would otherwise go into landfill. They are widely recognised for their positive environmental impact and helped save some 150 tonnes of items from entering the refuse system in the last year alone!

In terms of waste management, donating items instead of sending them for disposal is an example of waste moving up the Waste Hierarchy.



CASE STUDY:

The Estates Capital Manual was approved this year. The management process has been developed by the Estates team and is recognised as being a best practice tool to help ensure that projects are managed professionally, a standard approach is adopted and that the management processes are fully auditable and recorded.

The Sustainability Team is now a key consultee and gateway sign-off stakeholder in the project management process. James Dixon (Head of Sustainability) and Cara Tabaku (Energy Manager) were involved in the development workshops to embed sustainability and energy considerations into the various stages and criteria detailed within the dashboard.





4.5 Journeys

PERFORMANCE

SUSTAINABLE DEVELOPMENT ASSESSMENT TOOL

The Trust achieved a baseline score of 46% on the SDAT theme of Travel & Logistics in 2017-18. This has increased to 64% in 2018-19. Through this we are starting to contribute to the following UN Sustainable Development Goals at a local level:



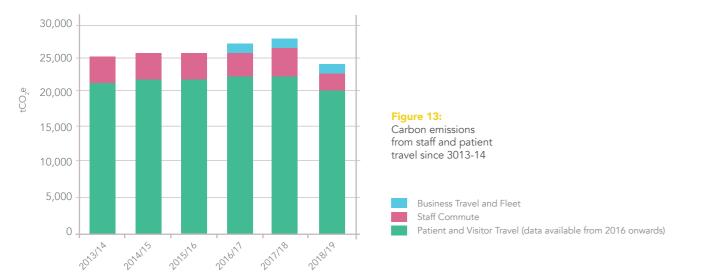




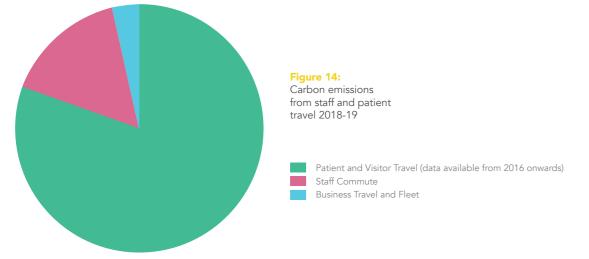




Total Carbon Emissions from Staff and Patient Travel



Total Carbon Emissions from Staff and Patient Travel 2018-19



Carbon emissions attributed to transport make up a significant proportion of the Trust's total carbon footprint. This year has seen a reduction in emissions from travel compared to previous years. Although patient and visitor travel still makes up the greatest volume, the level of emissions from these journeys has decreased.

Data provided by the North East Ambulance Service on the transport of patients by the non-emergency

ambulance to and from our sites shows that the number of miles patients have been transported has gone down this year, leading to a reduction in emissions from that area of almost 10%.

The North East Ambulance Service has recently been making efficiencies through route planning and better co-ordination within the service to reduce the mileage travelled. This is supported by the data and shows a significant result in terms of emissions from patient and visitor travel.

Our data shows that there has been an 8% reduction in emissions from business travel and fleet vehicles. There have been changes in policy, described in more detail in the sections below, which account for this decrease, and should continue to show results in future years.

Actions and Achievements

The Trust has committed to leading on influencing modal shift in travel and transport to more active and sustainable methods; benefiting health and the environment.

Currently only 30% of Trust staff travel to work by car. This low level is supported by a number of policies and practices; staff parking permits are allocated on a basis of need and there are a range of parking permits available. For example an ad-hoc parking permit provides flexibility for staff allowing them to park on site for up to 40 days a year according to their requirements. This reduces the number of cars on site daily. We have also introduced greater concessions for staff using the available Park-and-Ride options.

A number of new and revised policies have been developed this year. The Driving at Work Policy, Taxi and Courier Policy, Contract Business Lease Car Policy and the Car Parking Policy all support a shift away from single occupant car journeys and provide policy levers to deliver more sustainable travel and transport choices. For example staff are no longer allowed to use personal vehicles for journeys of over 100 miles and must use a hire car or pool car. Remuneration for the use of own vehicles has also changed to give more incentive for staff to take advantage of the

business lease car scheme, which gives us greater control over the type of vehicles being used for business related journeys and reduces carbon emissions from this area. All vehicles must now have emissions below 110qCO₂/ km, and diesel vehicles are only permitted where the mileage exceeds 10,000 miles per annum.

The combination of numerous courier contracts in to one has proven to be effective in reducing the number of journeys being made by multiple couriers and taxis transporting goods between sites, ensuring a reduction in emissions and a lowering of impact on local air quality.

The Trust procured a new hopper and bus contract this year, ready to be implemented in Autumn 2019. The service provides a free shuttle bus for staff to travel between the main hospital sites, as well as a bus service that staff can access for free travel on designated routes between the main sites and offices at Regent Point. The new hopper bus service will be provided by cleaner vehicles with Euro 6 rated engines, and larger vehicles reducing the number of journeys needed to transport staff.

Plans for the future

In 2019-20 there are plans to further increase modal shift away from journeys made by car to more sustainable and active modes.

A staff travel survey will be carried out, giving us more detailed information on how staff are travelling to work, and allowing staff the opportunity to tell us what the current barriers are to more active and sustainable travel. This will enable the development of a new Trust Travel Plan for staff, patients and visitors, with a focus on modal shift to lower carbon travel.

In 2019 there will also be a new between-site staff hopper and bus services will be implemented utilising lower emission vehicles.

Additional electric charging points will be incorporated in to our car parking facilities. We've procured electric vans for our Catering and Estates teams and when additional departmental pool cars are purchased the default will be to go with electric engines.

There are also plans to improve facilities for cyclists, introducing two-tier cycle parking at the RVI and additional cycle parking at our Regent Point offices.





The Newcastle Sustainability Network, established and chaired by our Head of Sustainability, James Dixon, brings together the sustainability leads of all of our city's institutions: Newcastle City Council; Newcastle University; Northumbria University; Northumbria Police; North East Ambulance Service and Newcastle International Airport. The group meet quarterly to collaborate on sustainability projects and strategies for the city and wider region.

Given the recent focus on improving air quality from vehicle emissions in the city centre, the network agreed to establish a sub-group focusing on collaborative efforts to develop more sustainable transport and travel options for people to access or traverse our city. The first meeting focused on the clean air zone/bridge toll charging consultation, identifying the opportunities for using the funding to invest heavily in infrastructure that would increase the amount of people travelling by active and sustainable means (walking, cycling and ultra-low emission public transport).



4.6 Purchasing

PERFORMANCE

SUSTAINABLE DEVELOPMENT ASSESSMENT TOOL

The SDAT does not have a set category for Purchasing or Procurement; instead it is embedded as a crosscutting theme that runs through all of the modules. From the appropriate criteria we achieved a baseline score of 39% in 2017-18 and have achieved 44% in 2018-19. We are also working towards the following UN Sustainable Development Goals:











Actions and Achievements

The Trust uses the furniture re-use portal 'Warp it' to track savings from moving redundant furniture from one area to another area of the Trust that needs it. This saves items from becoming waste, and avoids unnecessary procurement. This year we have approximately £160,000 in avoided procurement costs alone.

As a result of the increased media coverage, staff and visitors have become more aware of the impact of plastics in the natural environment.

The Trust has removed a number of disposable plastics from the catering department, and limited the purchase of other single use plastics (such as straws) to areas where there is an identified clinical need.

A number of wards with strong Green Champions have gone 'plastic-light' by purchasing reusable ceramic cups and plates, metal cutlery, and encouraging staff to have plastic free lunches.

There was also an NHS wide move to 100% recycled paper in 2018 which is saving 5,222 tonnes of carbon dioxide a year, whilst reducing costs nationally.

Partnership Working

Newcastle Good Food Plan: Catering and Procurement Group



The Newcastle Good Food Plan identified Transforming Catering and Food Procurement as one of the six themes to address in relation to the programme to support the Sustainable Food City Network. This recognises that as nearly 50% of all food is eaten outside the home, catering and procurement offers one of the most effective ways to drive large scale changes in healthy and sustainable food.

Newcastle Hospitals are part of the group that has been established as part of the Food Newcastle Partnership which brings together relevant organisations including universities, Newcastle Council, and Food Newcastle. This group is identifying what should be prioritised in Newcastle to address the actions highlighted in the Sustainable Food City award criteria and is supported by the North-East Purchasing Organisation (NEPO) who have carried out similar work with Durham's sustainable food partnership.

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Plans for the future

From 1st April 2019 Newcastle
Hospitals will be taking part in the
Meat Free Monday's campaign,
initially as a 3 month trial. Meat Free
Mondays started as the "Meatless
Monday" campaign in the USA and
was brought to the UK by Sir Paul
McCartney. It states that if everyone
were to reduce their meat intake
by 15% (or one day a week), there
would be significant environmental
and health benefits.

"We've come on leaps and bounds at the Trust in offering more veggie

and vegan-friendly dishes, or for those who simply want to reduce the amount of meat they eat. As a healthcare provider we have a responsibility to provide healthy and varied food to staff patients and visitors, plus, we want to celebrate the amazing things our chefs do with the humble vegetable!" Geoff Moyle, Trust Catering Manager.

Over the next year we will be embarking on a project to reduce single plastics across the Trust by looking at what we procure across our wards and departments. Plastic is a very useful product and we will never be able to remove it entirely from the Trust; however, we know there are a number of items which could be changed in order to reduce the single use plastic that we use. The Sustainability Team will be developing a template for wards and departments to carry out their own plastic audits, ensuring there will be no negative impact on the patients they see.

4.7 Adaptation

PERFORMANCE

SUSTAINABLE DEVELOPMENT ASSESSMENT TOOL

The Trust achieved a baseline score of 42% on the SDAT theme of 'Adaptation' on 2017-18. This has increased slightly to 45% in 2018-19. We are starting to contribute to the following UN Sustainable Development Goal:



Actions and Achievements

Building on the commitments in our Board-approved Climate Change Adaptation Plan, our Climate Change Risk Assessment and Action Plan was developed by our Emergency Preparedness, Resilience and Response Group and subsequently gained Board approval this year. We're now currently working through the actions,

which include: clinical directorates incorporating climate change into service planning; investment in green infrastructure; flood resilience and Estates Strategy investment planning.

The Trust is continuing to move away from paper-based systems to digital recording as part of the 'NHS paperlite' project. In doing so, the Trust has also been shortlisted for two categories in the Public Sector Paperless Awards 2019, which recognises organisations who have made great strides by highlighting best practice in digital transformation, working towards a truly paperless environment.

CASE STUDY:

This year we re-tendered for our staff inter-site bus services and ensured that sustainability, with a focus on air quality, was a key factor in the procurement evaluation criteria. The services were divided into lots covering our need for a staff-only 'hopper' bus, to enable regular staff travel between our main hospital sites, and two staff-and-public bus routes that link our hospitals to our other sites (Regent Point, Campus for Ageing & Vitality and Benfield Park Healthcare & Diagnostic Centre).

For both services we specified a minimum requirement of the cleanest diesel engine available (Euro 6), though awarded higher marks for Hybrid-Electric engines and the highest marks to fully Electric engines. In order to encourage competitive prices, and counter-act the higher capital cost of ultra-low emission vehicles, we offered suppliers the security of increased contract length for hybrid-electric and longer still for fully electric.

Unfortunately, the high mileage and run hours of the staff-only hopper resulted in suppliers only offering Euro6 engine vehicles. However, one supplier was able to offer bids for all three engine types on the staff-and-public bus routes. Whilst the electric buses were the most costly option, we received Board approval for their purchase given their overwhelming benefits with regards to sustainability and local population health. We expect to see these new buses, complete with NUTH and SHINE livery, on the road in 2020.



Plans for the future

We will be focusing on achieving the actions in our Climate Change Risk Assessment Action Plan, working closely with colleagues from Business Continuity, Estates Maintenance and Capital Projects in the process. Progress towards these actions will be monitored at our quarterly Sustainable Healthcare Committee meetings, chaired by Non-Executive Director.

We will ensure that climate change mitigation and adaptation are a key priority in each of the new builds and major refurbishments outlined in our Estates Strategy and ten year capital investment plan.

Our adaptation aims will also be achieved by some of the green space enhancement workstreams mentioned in the Buildings and Land section (section 4.4). With a greener estate that is accessible to patients, visitors and staff we will help improve their health and wellbeing, whilst also enhancing resilience of both our buildings (and staff!) to some of the impacts of climate change.

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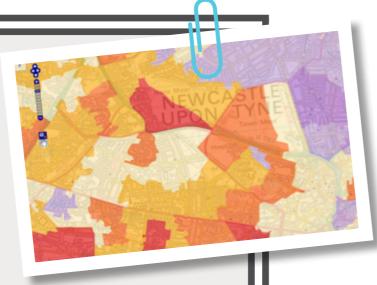
The Newcastle upon Tyne Hospitals NHS Foundation Trust Climate Change Adaptation Report, approved by the Trust Board in February 2017, outlined the applicable legislation and projected implications of climate change. It also outlined that the Trust would need to identify the expected risks and hazards to the Trust from climate change and undertake a local risk assessment of the impact of those threats and hazards.

Our Climate Change Risk Assessment focuses on the following climate change threats and hazards:

- Heatwave and Higher Temperatures in Summer
- Flooding and Increased Rain
- Severe Weather and Storm Events
- Snow and Id
- New and Emerging Pests and Diseases
- Disruption of domestic and international food production

The following hazards have been identified as longer term threats:

- Risks to natural capital
- Fossil fuel scarcity



After detailing the possible impacts, potential mitigation and adaptation measures were identified. Actions taken to mitigate the risks include developing continuity plans for all directorates, ensuring plans are in place to ensure vulnerable communities and vulnerable existing patients are prioritised and supported in the event of major and extreme events. Annual business continuity exercises include climate related scenarios such as flooding and water shortages; our workforce is prepared and trained to deal with different extreme weather scenarios. Additionally, a process has been implemented for new supply contracts, working with our major suppliers to understand the resilience and contingencies within their supply chain during any extreme weather events.

4.8 Models of Care

PERFORMANCE

SUSTAINABLE DEVELOPMENT ASSESSMENT TOOL

The Trust achieved a baseline score of 15% on the SDAT for 'Sustainable Care Models' in 2017-18; This score has increased to 24% this year. We are starting to contribute to the following UN Sustainable Development Goal:



Actions and Achievements

Following the principle of Making Every Contact Count (MECC) training and information was provided to help Community Nursing Staff both to identify when poor quality housing may be affecting a patient's health, and to know how to make a referral to an appropriate housing professional for advice and assistance.

The Trust worked in partnership with colleagues from Newcastle City Council to develop the information session and we supported their bid for funding from the Warm Homes Fund to develop resources for use with healthcare professionals.

This has multiple benefits
by reducing the impact
poor housing has on health,
and improving the energy
efficiency of those homes;
improving health outcomes
whilst delivering social and
environmental benefits.



Cathy Lawson, Environmentally Sustainable Anaesthesia Fellow

In 2018-19 Dr Ian Baxter, Consultant Anaesthetist and SHC member, and James Dixon (Head of Sustainability) were successful in their submission to the Association of Anaesthetists of Great Britain & Ireland (AAGBI) and the Centre for Sustainable Healthcare (CSH) for funding for a Sustainability Fellowship. This resulted in a funded clinical internship to focus on exploring

opportunities for sustainability improvements in the field of anaesthesia, establish best practice, define and remove barriers to best practice and share the findings amongst the medical community. Anaesthesia is a particularly important area for improving the sustainability of healthcare because of the global warming impact of various anaesthetic gases. As part of our commitment to lower the carbon impact of our models of care, the Sustainability Team have joined with Medical Education to deliver sustainability training to foundation year doctors. The training includes raising awareness about the health impacts of climate change, the opportunities they have to influence improvements as future medical leaders and integrating sustainability into their Quality Improvement projects.

Partnership Working

TIMS – Tyneside Integrated Musculoskeletal Services



TIMS is a single point of access service for patients with muscle and joint (musculoskeletal – MSK) problems. It offers self-care and fast access to information, resources and expert opinion about a variety of conditions. This gives patients greater control over their care and makes it easier for them to self-manage muscular conditions through a dedicated website – www.tims.nhs.uk.

Patients can also use the website to refer themselves to access local NHS physiotherapy and other musculoskeletal and pain services without having to visit their own GP first – reducing unnecessary journeys and GP appointments.

This, in turn, means that those with more complex conditions can be seen more quickly by specialist teams who will, where appropriate, refer them onto a hospital consultant for further assessment.

The community-based initiative – delivered through a partnership between Newcastle upon Tyne Hospitals NHS Foundation Trust and Gateshead Health NHS Foundation Trust – was launched on 1 October 2018.

Patients and local service providers were asked for their views on the current services available across Newcastle and Gateshead and their views helped to establish key elements of the service:

- A dedicated website providing a range of advice, on-line exercises and guidance to support people to self-manage their own MSK problems.
- A help and advice telephone line for patients and GPs.
- Providing services closer to home, reducing the need for hospital care and empowering and supporting people to play a role in improving their own health and wellbeing.

- Locations and opening times: the service will have clinics operating from eight different locations across the area. Service times are 8am and 8pm, Monday to Friday and 9am to midday on Saturdays.
- A more joined-up communitybased service between the two Trusts developed to help patients with musculoskeletal problems manage their condition in the most effective way.

Newcastle's Head of Therapy Services Stella Wilson said: "A key focus of our service is supporting selfmanagement and we've created a dedicated website to make it easier for patients to manage their own health conditions and access support from other agencies, allowing them to lead as fulfilling and independent lives as possible with less reliance on the healthcare system.

"For those who need further support, TIMS is about ensuring patients' with musculoskeletal conditions and chronic pain, have equal access to therapy, assessment and treatment, no matter where they live across Newcastle and Gateshead – essentially they're seeing the right person, in the right place at the right time.

"We're also working closely with third sector, voluntary organisations and leisure services to guide patients to other appropriate services which can benefit them."

It was estimated up to 40,000 MSK patients and 800 patients with chronic pain would be managed through the Single Point of Access service.

Plans for the future

In 2019-20 the MECC principle will be further utilised to ensure that patients are able to access housing advice to continue to try and reduce the impact that poor housing can have on health.

This will be done by working in partnership with other agencies to make training and information available to community nurses, and develop resources for healthcare professionals to use to help patients with housing issues.

The conclusion of the year-long Fellowship in Environmentally Sustainable Anaesthesia should bring outcomes that will drive down the environmental impact of our anaesthetic services, and those of other services across the country.

CASE STUDY:

The Neonatal Home Tube Feeding Partnership



Specialist nurses from the neonatal unit and children's services at the Trust - the Neonatal Home Tube Feeding Partnership - launched a new initiative to help some premature babies leave the RVI's neonatal unit a little earlier than usual, by providing extra support at home.

The final support most premature babies need before being discharged home from neonatology is with feeding, being tube fed until they are able to fully feed via the mouth. Regular visits at home by the children's community nurses mean that they can be supported with this important transition.

"Our ethos is very much around caring for the family unit as a whole", explains Nicole Colledge from the RVI's Neonates Feeding Team. "The Neonatal Home Tube Feeding Partnership is a collaboration between families, the neonatal team, and the children's community nursing team.

"The focus of the partnership is to assist families in their home with tube feeding, whilst their baby develops oral feeding skills at their own pace. It is easier for families and their new baby to develop close and loving relationships when they are the primary care giver and their baby is at home."

Aside from the obvious multiple benefits to the babies and their families, this project is having a positive impact on the environment by reducing the number of journeys made to the hospital and reducing the number of days care given at the resource intensive hospital as opposed to the home environment.

Since the partnership began there has been an average of 20 'hospital bed days' saved per baby/ family supported by the scheme.



4.9 People

PERFORMANCE

SUSTAINABLE DEVELOPMENT ASSESSMENT TOOL

The Trust achieved a baseline score of 66% on the SDAT for 'Our People' in 2017-18. The score has increased to 78% this year. The Trust also achieved a baseline score of 48% for 'Corporate Approach' which has increased to 57% this year. We are clearly contributing to the following UN Sustainable Development Goals at a local level:













And are starting to contribute to the following SDGs:









Actions and Achievements

Engaging staff in sustainability initiatives is an integral part of embedding a culture of sustainability in the Trust. Over the last year we ran a number of awareness events. One of these awareness events was the Northern Sustainability Innovations Conference as part of the Great Exhibition of the North. The conference looked at the past, present & future of sustainability innovation in the north. The daylong conference saw sustainability leaders from both the public and private sector come together to present and lead workshops on a wide range of sustainability topics including engagement, circular economy, querrilla gardening and the impacts of air pollution on health. Our annual staff sustainability survey showed a significant increase in staff awareness of sustainability work in

the Trust, and over 87% said that is was "very important" that the Trust act sustainably (section 3.3).

The Trust achieved 'Continuing Excellence' Better Health at Work Award. The Better Health at Work Award recognises the efforts of employers in the North East and Cumbria in addressing health issues within the workplace. 'Continuing Excellence' recognises the importance of organisations sustaining the progress they have made during their participation in the award and encourages them to use their experience to support others. We have over 80 trained Health Champions, led by the Better Health at Work Coordinator, who have translated their passion for this programme into a wide range of activity and support for their peers. 2018 campaigns include: Nutrition

and Hydration week, On Your Feet Britain, Mental Health Awareness Week, plus ongoing free health checks.

The Trust has launched the Early Access Advice Project, a collaboration between HR, Occupational Health and managers to reduce sickness absence and promote wellbeing. It is being piloted within facilities management where the overall sickness rate has reduced over the last 12 months.



The Trust believes that in order to continuously deliver high quality services it must recruit, develop and retain a workforce which is valued and whose diversity reflects the communities it serves. We have three Staff Networks, representing BAME, LGBT and disabled staff. A network of allies - Equality Champions - has also been formed to support and embed our equality agenda. A number of key events are recognised and celebrated each year, including (but not limited to) LGBT History Month, Black History Month, Disability History Month and NHS Equality and Diversity Week where associated skills based workshops are developed and offered to all staff Trust-wide.

Newcastle Hospitals has a 942 strong voluntary workforce and to mark National Volunteer Week the Trust held a celebration afternoon tea and awards event, to show appreciation for the valuable contribution they make to patient care. We are finding more and more people, who are looking to Volunteering with the Trust as a way of combatting loneliness and isolation. Our wards and departments offer a very warm welcome and volunteers are treated as very much part of the team. With over 70 different roles to choose from, we are able to match the

applicants with a role which meets

their needs and gives them the most rewarding experience possible.

Staff at Newcastle Hospitals responded generously to a call to donate gifts to local people in need at Christmas. Cecelia McIntyre, a sister at the Freeman Hospital, came up with the idea of asking staff

to give toiletries, new underwear, socks, hats and gloves and chocolate treats for the Newcastle East Food Bank, based in Heaton. Departments from across the Trust organised collection points, and a van full of donations delivered thousands of items to the food bank.

Partnership Working

We launched the NuTH Green Gym in collaboration with local conservation groups, which gives staff and their families an opportunity to part in a wide-range of activities around the region including beach cleans, tree planting and wildlife surveys.



The NUTH Green Gym is helping staff:

- Feel fitter, stronger and hopefully healthier through fun and physical activities outdoors
- Boost self-esteem and confidence by learning new skills
- Reduce stress and become more resilient by spending time outside in green spaces
- Feel more connected to their community and others by volunteering and making difference

Plans for the future

Every day, our 14,000 plus staff work tirelessly to provide extraordinary care for patients. Whether it's in our hospitals or the community, clinical areas or behind the scenes, their dedication, passion and spirit is what makes Newcastle Hospitals such a special place to be part of. This year we are launching our first Celebrating Excellence Awards, to recognise the outstanding work of our staff, volunteers and fundraisers. This is our opportunity to shine a spotlight on the teams and individuals who really demonstrate excellence and thanks to the generosity of sponsors, we're planning a gala awards evening in June.

We will be hosting more engagement events on a variety of sustainability topics during Clean Air Day, active travel month, plus our most ambitious Waste Awareness Week to date. There will also be Green Champion networking events



which will provide an open forum for staff to come together, share what they have been up to, ask questions of the Sustainability Team, and help others improve sustainability in their area.

We are relaunching Green Impact for 2019. Based on feedback from the teams we are changing the Green Impact schedule to align with the calendar year giving teams the opportunity to complete more actions. Green Impact is a program where staff complete an online workbook of small sustainability actions to improve sustainability in their area. Covering the whole breadth of sustainability, including waste, staff wellbeing, travel, energy and procurement, if staff have a particular area of interest there is an opportunity to run their own project as part of the workbook.



Project Choice

Through Project Choice, the Trust offers young Newcastle adults with learning difficulties, disabilities or autism, opportunities to support them to become positive role models, and enable them to actively contribute and feel valued for what they achieve. This project equips students with work-based transferable skills enabling them to be work ready after completion of an academic year and also provides a recognised qualification in employability skills.

Following completion of internships a high percentage of learners (80%) progress into paid employment through various routes- a fantastic result when compared to the national figure of 7% of people with a learning disability being employed. The Trust has provided over 400 placements to-date, which have provided people with employable skills, experience and confidence, and supporting them into work.



