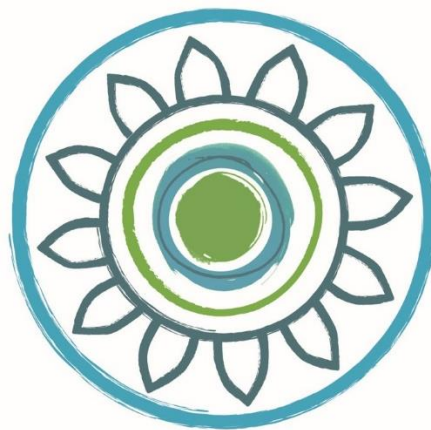


GREEN TEAM COMPETITION

CENTRE FOR SUSTAINABLE HEALTHCARE



2024 IMPACT REPORT

Great Ormond Street Hospital for Children
NHS Foundation Trust



CENTRE *for*
SUSTAINABLE
HEALTHCARE
inspire • empower • transform



Sustainability in
Quality Improvement

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BACKGROUND

In September 2023, Great Ormond Street Hospital (GOSH) for Children NHS Foundation Trust commenced a [Green Team Competition](#) in partnership with [The Centre for Sustainable Healthcare](#) (CSH). The Green Team Competition is a clinical leadership & engagement programme for NHS organisations wishing to improve the sustainability of their service.

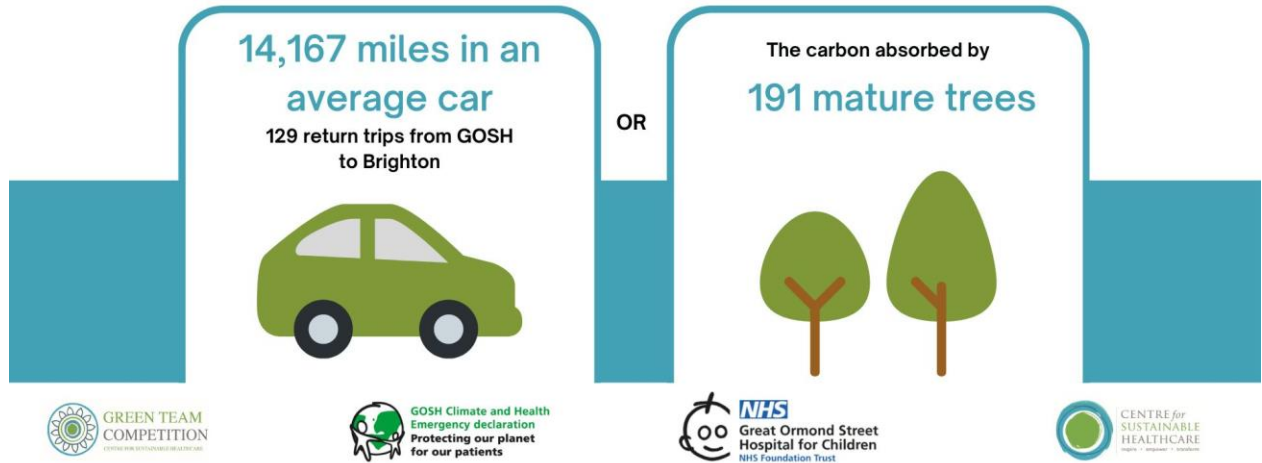
CSH has worked directly with six clinical teams across GOSH to add sustainable value within their service via mentoring in the use of [Sustainability in Quality Improvement \(SusQI\)](#) methodology. SusQI is an approach to improving healthcare in a holistic way, by assessing quality & value through the lens of the sustainable value equation (Figure 1). The 6 teams were encouraged to consider each element of sustainable value to identify high impact improvement ideas then plan, implement & measure the impact of their projects.



Figure 1. Sustainable Value Equation Source: Centre for Sustainable Healthcare

At the April 30th Showcase and Awards Ceremony, the teams presented their projects, including the anticipated savings & opportunities to scale and spread, to an audience from the Trust and the judging panel.

The combined 2023-24 Green Team Competition projects have projected annual savings of
£284,098 and 4,797 kgCO₂e
which is the equivalent of



“The Green Teams Competition and the process it has supported our staff through has been a success. Staff teams from across the hospital have identified room for innovative improvements in their processes and the cost, carbon and care benefits have been measured. We are blown away by the effort, creativity and the results! Incredible savings are projected, well beyond what we expected. We will now aim to bring visibility to these successes, embed them and where possible scale them up”.

Nick Martin, Head of Sustainability & Environmental Management at GOSH

“It was a real pleasure to see the teams showcase their amazing work and accomplishments over the past 10 weeks. It was an informative experience for me as a judge and a great opportunity to celebrate the success of all the teams. All hands need to be on deck to support and scale these projects if we are to see the sustainable change we seek”.

Peace Joseph, GOSH Governor and member of the Governors Sustainability Working Group

COMPETITION ENTRIES - INDIVIDUAL PROJECT CASE STUDY REPORTS

Please click the links below to see the project summary and report in the [CSH Sustainable Healthcare Resource Library](#).

1. [Kapsule Kids](#), Pharmacy
2. [Reducing hospital plastic use through re-use of LPDE plastic feed hanging bags](#), Nursing (Koala Ward)
3. [RecEYEcling](#), Optometry
4. [Sustainably supporting mobility - Developing a walking aid re-use scheme at GOSH](#), Physiotherapy
5. [Sustainable use and reuse of Augmentative and Alternative Communication devices in GOSH](#), Speech and Language therapy
6. [Optimising wheelchair returns in a PAN Hospital Wheelchair Service](#), Occupational Therapy

For a breakdown of savings & impact across the sustainable value equation, please see [Appendix 1](#).

AWARDS



WINNERS: PHARMACY TEAM

Congratulations to the WINNING team, Pharmacy, led by Snehal Bakrania and Sadhna Ayesha Sharma.

The project focussed on empowering children to switch from liquid to tablet medications and is an excellent example of a change improving outcomes across the sustainable value equation.

“Overall, this project has been a delight to carry out. Working with Snehal and the overall team has been wonderful and seeing the patients effectively take their medication knowing the global and economic impact made is encouraging.”

Sadhna Ayesha Sharma, Cardiology Pharmacist

“I have thoroughly enjoyed doing this project alongside Sadhna. It is extremely encouraging to see patients be able to take control of their own care and work together with them and their families to ensure the best outcomes. Although it was only launched in a small cohort of patients, the environmental and financial outcomes we came out with were a lot and gives me courage to attempt to expand this project going forward.”

Snehal Bakrania, Medicines information pharmacist

Kapsule Kids, Pharmacy Team



**GREEN TEAM
COMPETITION**
CENTRE FOR SUSTAINABLE HEALTHCARE

Aim: To encourage and empower children to take tablets and capsules, reducing the usage of liquid medication in the heart and/or lung transplant population. GOSH support approximately 20 children undergoing transplant per year.

Outcome: In the project period, 5 patients successfully transitioned to tablets instead of liquid medications. Projected savings below are based on transitioning 10 patients a year and include 1 years supply of tacrolimus and mycophenolate mofetil (MMF) and a 6 week supply of co-trimoxazole (from then provided by local pharmacy).

KAPSULE KIDS



Clinical

- Patients and families reassured that swallowing tablets is safe.
- May improve compliance due to poor palatability of some liquid medications.
- Address concerns regarding national co-trimoxazole liquid shortage.



Environmental

329 kgCO₂e per year, equivalent to driving 972 miles in an average car.



Financial

£258,255



Social

- Tablets easier for families to transport and store, and have longer expiry dates once opened.
- Contributes to improving long term independence for young adults.
- Ward nursing staff save time as drawing less liquid medicines.
- Pharmacy team found supporting children to learn a new skill satisfying to their job role, however the project did come with a burden on time for an already very busy team.
- Reduced need for MMF liquid which carries teratogenic risks to pregnant staff.



CENTRE for
SUSTAINABLE
HEALTHCARE



Great Ormond Street
Hospital for Children



GOSH Climate and Health
Emergency declaration
Protecting our planet
for our patients

NEXT STEPS

We encourage participating teams to continue to embed and maintain the changes made during the competition timeframe, while continuing to work towards their longer term aims. The teams' projects provide excellent examples of how bringing sustainability and QI together can bring multiple benefits to the Trust. Both sustainability and QI teams at GOSH will continue to collaborate with the Green Teams and more generally to drive sustainable improvements.

The winning team, Pharmacy, will present at an upcoming Council of Governors meeting to share their outcomes, learning and ongoing support needs for embedding and scaling their initiative.

The sustainability and comms team at GOSH plan to share the project outcomes and learning widely through the Trust. We encourage teams to share their projects at regional and national healthcare conferences. Promotion of the projects in these forums allows the hard work of GOSH staff to reach more health professionals who may be inspired to make changes within their own practice.

ACKNOWLEDGEMENTS

CSH would like to thank the teams for all their enthusiasm, dedicated work & creativity in devising and completing their projects.

Thank you to Nick Martin, Head of Sustainability & Environmental Management and Charlotte Adams, Sustainability Delivery Project Manager, both from GOSH Space and Place, for partnering with us for a Green Team Competition at GOSH.

Thank you to Agnes Kiraly, Quality Improvement (QI) Lead in the GOSH Quality Team along with the wider GOSH QI team, for their work to align sustainability and QI across the organisation.

Thank you to our judging panel for your time and keen interest in the projects.

- Stephen Tomlin, NCL Lead for Sustainable Medicines
- Peace Joseph, GOSH Governor and member of the Governors Sustainability Working Group
- Dr Ayoma Ratnappuli, Education Fellow, The Centre for Sustainable Healthcare (CSH)

Thank you to Rosie Hillson, Sustainability Analyst, CSH, for her careful and highly skilled work in carbon footprinting. Rosie supported the teams in carrying out their own carbon footprinting and equipped teams with the knowledge and tools to carry out future calculations for projects in the future. Carbon calculations are essential to integrated project reporting and make plain the true cost and impacts of services to allow more responsible decisions to be made in healthcare organisations.

Appendix 1: POTENTIAL ANNUAL SAVINGS

The following table provides detail on the **annual** savings to the Trust from the 2023-4 Green Team Competition. Savings in black text are based on actual changes and post-change data collected in the 10-week competition. Savings in blue text are based on implemented changes that require longer to collect outcome data (outcomes are predicted). For more detail on projects, please refer to the individual project case study reports (links above).

Project	Financial Outcomes	Environmental (CO2e) Outcomes	Social Outcomes	Clinical Outcomes
Pharmacy	258,255	329	<ul style="list-style-type: none"> • Tablets easier for families to transport and store, as well as having longer expiry dates once opened. • Contributes to long term independence for young adults • Ward nursing staff save time as drawing less liquid medicines. • Pharmacy team found supporting children to learn a new skill satisfying to their job role, however the project did come with a burden on time for an already very busy team. • Reduced need for MMF liquid which carries teratogenic risks to pregnant staff. 	<ul style="list-style-type: none"> • Patients and families reassured that swallowing tablets is safe • May improve compliance due to poor palatability of some liquid medications. Address concerns regarding national co-trimoxazole liquid shortage
Nursing, Koala Ward	967	193	<ul style="list-style-type: none"> • 100% surveyed nurses had concerns about environmental impacts of providing healthcare. • Staff reported this is a simple change that saves time. 	<ul style="list-style-type: none"> • Patients are not affected by the change.
Optometry	5,472	10	<ul style="list-style-type: none"> • MDT supportive of change, <i>“That’s a fantastic idea”</i>. • 100% of parents reported that they would happily donate old glasses to be recycled and 53% happy to receive a refurbished pair • Parent comment: <i>“Excellent idea and a no brainer for us!”</i> 	<ul style="list-style-type: none"> • Repairs can be done immediately without waiting at least 1 week for parts to be delivered, reducing risks of disruption to vision during critical paediatric period that can cause permanent visual loss. • <i>“I have done so many repairs on the day for patients that have aphakic prescriptions who are now not having to wait for their glasses to be repaired.”</i> Staff member

Project	Financial Outcomes	Environmental (CO2e) Outcomes	Social Outcomes	Clinical Outcomes
Physiotherapy	955	1,600	<ul style="list-style-type: none"> • Clarification in process helps staff engage in returning process more often and consistently. • Staff commented <i>"It is easy to follow"</i> and <i>"following the chart helps me check the aids logically"</i>. • Patient comments <i>"Returning my crutches locally saves a lot of time and hassle"</i> and <i>"I'm happy they're not going to waste"</i> 	<ul style="list-style-type: none"> • No change to patient care and clinical outcomes
Speech & Language Therapy	6,073	772	<ul style="list-style-type: none"> • Local SLTs, teachers and parents empowered to troubleshoot simple issues, preventing delays in children accessing devices • Reduced troubleshooting calls to our service saves staff time • Donating old devices to local SLTs provides local teams with resources they would not otherwise have access to – for staff training and patient trials. This may support local SLT confidence and job-satisfaction. 	<ul style="list-style-type: none"> • Patients no longer using their device will be identified and can be re-assessed for a more suitable device sooner - improving patient communication both at home and school - benefiting wellbeing and education attainment.
Occupational Therapy	12,376	1,893	<ul style="list-style-type: none"> • Faster access to chairs may reduce stress and frustration to patients and their families. • Children more readily able to engage socially with family, to see friends, go to school, etc. • A streamlined process may reduce staff frustration and time spent finding and loaning wheelchairs, boosting staff well-being and job satisfaction. 	<ul style="list-style-type: none"> • Children may have faster access to the most suitable chair which may be beneficial in several ways, e.g. sitting up helps reduce chance of chest infections as well as prevent musculoskeletal contractures.
Total Savings	£284,098	4,797 kgCO2e		