



GO SUSTAINABLE - CLINICAL CODING TEAM



TEAM MEMBERS: Katie Fairhurst – Clinical Coding Service Manager, Vanessa Bennett – Lead Clinical Coder, Kelsey Currah – Lead Clinical Coder, Daniel Whittaker – Deputy Clinical Coding Manager, Grace Stearn – Lead Clinical Coder

Background: Climate emergency! Following the Royal Cornwall Hospital Trust's pledge to achieving Net Zero (carbon neutral) by 2030, members of the Clinical Coding department started investigating how we could change our working practices to ensure we were doing all that we could to play our part. As an administration service within the NHS, we feel that we are in a really good position to look at our supply chain, to review what we use and how we use it, as well as making the best use of digital technology. We also want to promote sustainable awareness and action within our team, aiming to reassure people that change doesn't need to be scary and that small changes can make a big difference.

Specific Aims:

1) *Going paperless and reducing stationery use*

- To reduce paper used in the department to generate carbon and financial savings by a. reducing paper use in clinical coding training materials, and b. eliminating use in Clinical Coding audit, validation and clinician projects.
- To evaluate savings made by reduced office stationery use in changing work practices during the Covid19 pandemic.
- To liaise with RCHT sustainability and procurement teams to investigate more sustainable office stationery options for items continuing to be required.

2) *Team education and action including a switch to use of Ecosia search engine*

- To enhance colleagues' knowledge and awareness of the climate emergency and how they can help.
- To encourage the clinical coding team to use a more sustainable search engine, Ecosia¹.

Methods / approach and measurement

Going paperless and reducing stationery use

We audited our pre-covid (2018-2020) and post covid (2020-2022) paper, toner, envelope and stationery usage. Financial cost was provided by the trust procurement team. Carbon equivalent savings for paper were calculated using the emissions factor from the UK Government Department of Business, Energy & Industrial Strategy (BEIS) 2021 database and for the remaining items using the Greener NHS emissions factor for office equipment, telecommunications, computers & stationery.

For the paper use continuing post-covid, we reviewed our processes with the wider clinical coding team, HSMR reviewer, and clinicians via Microsoft Teams meetings and email communications. We used the



information collected to format appropriate digital templates using Microsoft Word and Excel. We trialed the new templates ensuring they are safe to use, fit for purpose and accessible to recipients. We are continuing to liaise with the multi-disciplinary team to gain insight as to how this process has gone so far and whether any changes need to be made to fully enable 100% paper free practice in clinical coding audit and validation.

We also researched more sustainable office stationery options, however found limited options within the current NHS chain supply. We are continuing to liaise with Trust Finance team to establish whether current budgets will allow for procurement of more expensive but more long lasting and sustainable office stationery supplies. Through our research we identified the Trusts participation in the Terracycle pen recycling initiative and set up boxes within our offices so that clinical coding staff can collect pens to be recycled rather than disposed of in general waste.

Team education and switch to Ecosia search engine

An office audit of energy efficiency and recycling behaviours such as turning off equipment, lights, etc, supported us to identify ways we could build awareness in the team. We positively found that many staff already practiced environmentally positive behaviours. We developed posters and a newsletter (see Appendix 1) to share information with staff working both on site and remotely. Posters were placed in offices and shared via email. A Newsletter was emailed out to all staff members with support from the sustainability team, requesting staff feedback and ideas for future editions. Qualitative data was collected on staff engagement, opinions and on the effectiveness of our education campaign.

As a department Clinical Coding use search engines frequently and so a switch to Ecosia could be a very simple and quick strategy for us to make a positive difference. Ecosia are a carbon negative company, who dedicate 100% of their profits to climate action, with at least 80% financing tree planting projects². Emails were sent out to staff encouraging their use of Ecosia instead of Google due to it being a more sustainable search engine, along with instructions on how to add the extension to their browser. After 7.5 weeks, we asked each team member to feed back to us the number of searches they had undertaken using Ecosia.

Results:

Going paperless and reducing stationery:

With the department’s flexible working policy and following changes made to department practice and the move to more digital ways of working, the need for more traditional stationery items, printed letters and postage has reduced. We were able to become totally paperless for clinical coding audit, validation and clinician proforma reconciliation. We have also managed to greatly reduce the amount of paper used in other areas of the department.

Environmental and financial benefit

Financial and CO2e savings across 2 years are demonstrated in the table below, reflecting an 83% reduction in paper use, 60% reduction in stationery and toner use, and a 100% reduction in envelope usage.

Table 1:	Procurement data 2018-2020	Procurement data 2020-2022	Financial saving	CO2e saving
<i>Paper use</i>	£357.13 43 boxes of paper (215 reams)	£61.17 7 boxes of paper (35 reams)	£295.96	302.4kgCO2e
<i>Stationery items e.g., pens, Sellotape, notepads</i>	£176.88	£53.32	£123.56	65.49kg CO2e

Toner	£851.95	£37.5	£814.45	431.66kgCO2e
Envelopes	£1497.31	£0.00	£1,497.31	793.57kgCO2e
Total Saving over 2 years			£2,731.28	1,593.12kg CO2e

For 2022-2023, we expect to reduce our paper cost by a further £26.13 and toner by £18.75 (50% of current use). This will also lead to additional 128kg CO2e saved from reduced paper and 215.83kg CO2e from reduced toner use, bringing total savings to **£2,776.16** and **1,936.95kg CO2e**. This saving is equivalent to driving 5,576.5 miles in an averaged sized car.

Clinical and Health outcomes: There are no negative impacts on patient care.

Social sustainability: By going paper free for our clinical coding audits, validation and work with clinicians, we are now working in a more effective and efficient way which has led increased productivity in our team.

Team education and switch to Ecosia search engine

Social sustainability: The posters and quarterly Go Sustainable newsletter have been extremely well received by our team along with the RCHT Sustainability Lead. The quotes from our colleagues below demonstrate the positive social impact that raising awareness and education are having on the team,

“Made me change a few things at home”

“Posters are great, love the 'did you know' section”

“This is brilliant, I’m so glad we can share our recycling/sustainability info within the department and I’m looking forward to hearing what others have found out and how they are helping our precious planet”

92% of staff members who responded adopted the use of Ecosia as their default search engine. On average, Ecosia can plant one tree every 50 searches³, and each tree planted will each remove 50kg of CO2 from the atmosphere during an expected 15-year lifetime. Over a 7.5 week period, 2,328 searches were made by staff, estimating 46.56 trees planted. If scaled across a year, this could equal 322 trees planted by the clinical coding team, capturing 1,073kgCO2e per year for 15 years. This is not included in our overall carbon savings as this does not represent a carbon saving to the Trust.

We have seen increased staff awareness of their potential to make a difference by changing their internet habits. Staff members have gone on to promote benefits of using Ecosia to the wider community, such as friends and family. One staff member commented,

“I actually have the Ecosia search on my phone now too”.

We have had communications with the RCHT Sustainability Team to discuss Trust wide adoption of Ecosia. Further discussions are underway with the Cornwall IT Service (CITS) to see if this may be a possibility.

Barriers encountered:

- Time constraints: We tried to mitigate competing pressures by setting aside dedicated time to this project, managing our workloads, and delegating amongst the Green Team.
- Logistics: The Clinical Coding department work in multiple offices and Trust sites making dissemination of educational resources and recycling of equipment challenging. An alternative approach was actioned to give all staff access to pen recycling. We also utilised our internal postal system to send out our posters and used email as the main communication method.

- NHS Supply Chain: there are limited sustainable stationery options in the current NHS catalogue along with unfavourable cost implications. We have approached our colleagues in finance and procurement to investigate if savings made in other projects can be redirected to purchase more sustainable stationery options for the department; and continue to investigate the supply chain catalogue.

Steps to ensure lasting change and conclusion:

This competition has allowed us to highlight areas where we can streamline department practices and realise the potential benefits of a more sustainable service. Our work shows that small changes can be very effective and help people to not feel overwhelmed at the thought of sustainable action, with a member of the team commenting, *"The GO sustainable poster is great - a gentle reminder of all the little changes we can make"*.

The success of our paperless vision and work so far has been due to the engagement from our clinicians and collaboration with members of our department, RCHT Sustainability and finance who are all essential to the success of this project and its future progression. We aim to raise awareness across other administrative departments to highlight how digital working and making small changes can lead to significant financial savings as well as a cleaner carbon footprint. We will continue to create digital, informative content to help embed more sustainable and environmental awareness and habits by continuing to liaise with the RCHT Sustainability Team and drawing on information available in the public domain that we can circulate via our ongoing Go Sustainable newsletter. We will collaborate with our staff who are also a brilliant source of local information and resources from their own experience and research.

References:

1. Ecosia vs. Google: Which is the best search engine?
2. Ecosia - the search engine that plants trees
3. This eco search engine plants trees every time you search for something (trafalgar.com)

Appendix 1: Example poster



GO SUSTAINABLE

Are you and your department doing your bit?

What level is your department?

What more can you do?

	We do that!
 <ul style="list-style-type: none">We reduce the amount of paper used and use recycled paper and office equipment when needed.Active engagement with sustainability team and RCHT Sustainability goals.We participate in Green Pledge eg meatfree Monday	<input type="checkbox"/>
 <ul style="list-style-type: none">We unplug equipment when it is not in use.We use ECOSIA as our search engine.We avoid using single use plastics, where possible. e.g. water bottles, pens.	<input type="checkbox"/>
 <ul style="list-style-type: none">We make use of Trust Recycling points e.g plastic bottles, tin cans, paper.We do not leave doors, windows or blinds open unnecessarily.We turn off equipment at the plug and use natural light in the office. Leave lights off.	<input type="checkbox"/>

DID YOU KNOW?

 <p>2°C increase in office temperature creates enough CO2 to fill a hot air balloon.</p> <p>TURN HEATERS DOWN OR OFF!</p>	 <p>Recycling 1 glass bottle will save enough energy to run one of our work laptops and energy saving screens for 2 working days!</p> <p>RECYCLE WHAT AND WHERE YOU CAN!</p>
---	--

◆ www.optimalmonitoring.com ◆ <https://sustainablehealthcare.org.uk/> ◆ Sustainable RCHT | Royal Cornwall Hospitals NHS Trust ◆





CENTRE *for*
SUSTAINABLE
HEALTHCARE
inspire • empower • transform