Towards A Net Zero Clinical Research Facility: The NIHR Oxford Health CRF Green Plan Strategy

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Aim: With the NHS being responsible for approximately 4% UK carbon emissions, clinical research can play an important role in reducing the ‘carbon footprint’ of the NHS. A Green Plan was therefore implemented to enable the NIHR Oxford Health Clinical Research Facility (OH-CRF) to contribute to the NHS aim to be “Net Zero” by 2040.

Methodology:
A 5-year Green Plan was developed using NHS guidance. It identified 30 OH-CRF specific strategies across the areas of:
- Promoting digitalisation
- Reducing healthcare-related waste
- Improving processes and service accessibility
- Reducing travel and transport use.

The finalised Green Plan was implemented in March 2023.

An audit of how many of the a-priori established goals was conducted every six months (August 2023, March 2024) to establish success rate and compare the planned goal with the benefit obtained.

Feedback was gathered from OH-CRF staff in June 2024 regarding implementation of the plan and challenges experienced over the previous year.

Results:
In August 2023, 20 (66%) strategies were implemented. By March 2024, 28 (93%) strategies were implemented whilst 2 (7%) had been attempted but were not possible.

Plan Implementation:

<table>
<thead>
<tr>
<th>No. Strategies</th>
<th>August 2023</th>
<th>March 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implemented</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td>Not Implemented</td>
<td>10</td>
<td>2</td>
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Of the strategies implemented 7 (25%) were completed, 17 (61%) were ongoing and 4 (14%) were implemented but not successfully by March 2024. Degree of success was analysed and further illuminated through an anonymous, electronic questionnaire filled in by 9 OH-CRF staff-members.

Successful Strategies Included:
- Digitalisation through use of electronic archiving, secure email communications and eCRFs where possible.
- Use of virtual visits and reduction in number of face-to-face visits when protocols allowed.
- Reduction of stock medication orders, reducing waste and transport.
- Introduction of an SOP to coordinate repurposing of research materials.
- Reduction of single use items for hospitality.

Less successful strategies included:
- Reduction of general stock orders for the unit due to demand.
- Use of a cycle-post system for short distance transportation of materials due to logistical factors.
- Sponsor agreement to green strategies during study set up due to protocol requirements and communication.

Successful Strategies Included:
- Staff buy-in to the green plan was good with an average rating of 7.89/10 for importance of sustainability in OH-CRF. However, whilst 100% of staff were aware of the plan, only 55% staff were aware of specific goals relevant to their role.
- Reducing stock (general and medication) was seen as a realistic aim with staff rating it as 4/5 but feedback noted that communication, time to check stock levels and plan and varying demand influence ability to carry out this goal.
- Digitalisation was seen as a less realistic aim with a rating of 3.78/5. Cost, reliability of electronic systems, study sponsor and protocol requirements, training needs and participant accessibility were noted as influencing factors.

Next Steps:
- Earlier discussion with sponsors regarding green initiatives such as stock repurposing and document digitalisation.
- Pilot of rating scale digitalisation to promote time for training, system familiarity and opportunity to establish reliability of electronic versions.

Conclusion:
Overall, the Green Plan was successfully developed and implemented with good staff involvement and awareness. Implementation of the plan highlighted the need for good communication, time and affordable, reliable, purpose-fit alternatives to traditional paper documentation in achieving a more sustainable approach to healthcare research. Study sponsor and protocol requirements were also demonstrated to be a key influencing factor.

REFERENCES: