

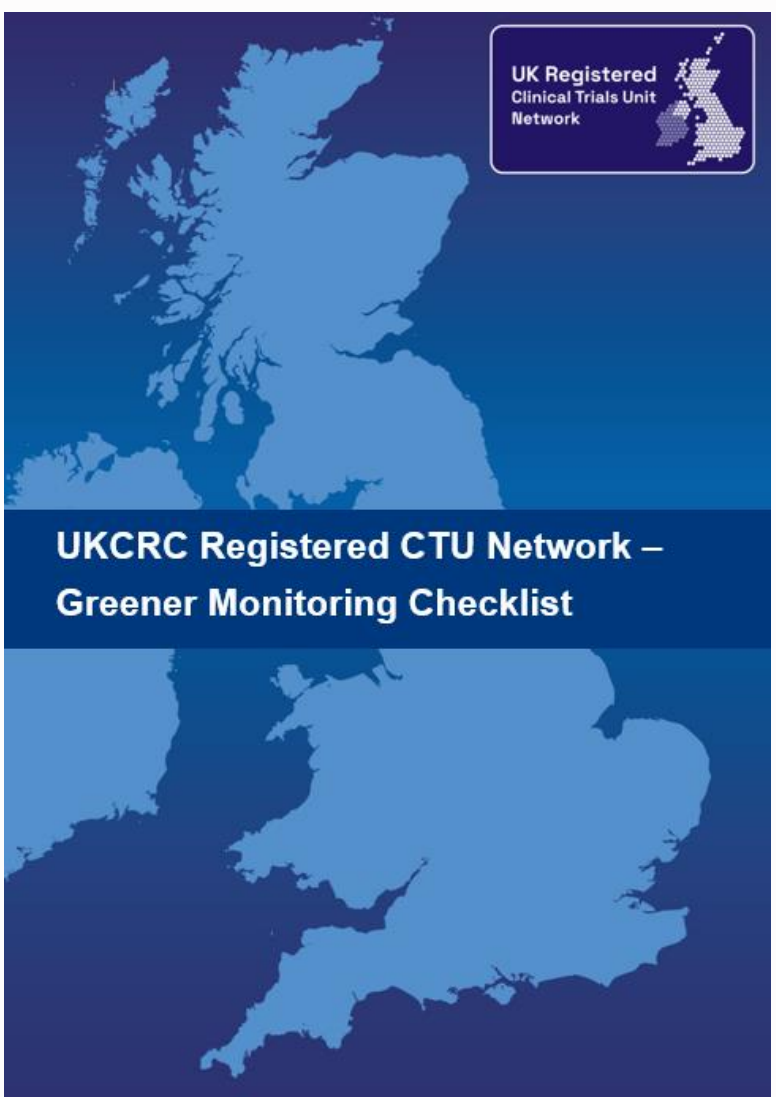


Introduction

Clinical trial monitoring contributes a substantial proportion of a trial’s carbon footprint, with travel for on-site monitoring visits estimated to contribute 10–15% of emissions (Griffiths et al, 2024). In 2024, the UK Registered CTU Network Monitoring Operations Group published Greener Monitoring guidance to support Clinical Trials Units in considering lower-carbon monitoring practices.

Methods

Questionnaires were circulated and informal interviews conducted with CTU and NHS staff involved in monitoring. Topic areas included application of The Greener Monitoring checklist by a UKCRC registered CTU and practical experience of central, remote and hybrid monitoring, including the use of electronic health records (EHRs) by Sponsor monitoring staff and NHS participating site staff. The monitoring checklist was implemented in the ICR-CTSU coordinated, CRUK-funded ATARI trial. Informal interviews with the ATARI trial team focused on how the checklist was applied to reduce environmental impact of monitoring. Practical experience of monitoring methods were explored with four CTU staff responsible for monitoring, and four NHS participating site staff, including the challenges, opportunities and practicalities of maximising remote monitoring.



Approach

Questionnaires & interviews
Monitoring staff and NHS staff

Interviews
CRUK-funded ATARI Trial Team

Topics

Central, remote & hybrid
monitoring

Using the
Greener Monitoring Checklist

Key Areas Explored

Challenges, Opportunities and
Practicalities of Maximising
Remote Monitoring

Practicalities of applying the
Greener Monitoring checklist

Scan here for the Greener Monitoring resources



Results

Application of the Greener Monitoring checklist demonstrated that reductions in a trial’s carbon footprint can be achieved through central monitoring, remote site visits and proportionate, risk-based on-site monitoring. Direct access to EHRs enabled source data verification to be completed remotely, reducing the need and/or frequency for on-site visits. Staff reported that the use of remote monitoring techniques improved scheduling flexibility, efficiency, and reduced disruption to the working environment. Challenges were identified, including variability in EHR access, inconsistent information governance policies, difficulties reviewing paper records remotely, and concerns about missing critical data errors. Relationship-building between CTU and site staff was also perceived as potentially more difficult with remote interactions.





Reduce travel through risk-based hybrid monitoring





Use remote EHR access where governance permits





Maintain trial quality through proportionate oversight





Collaborate to promote relationship-building



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