

Development of a Health Informatics Working Group to Enhance the Conduct of Research in Primary Care

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Introduction

Achieving and maintaining participant recruitment to clinical trials in primary care is challenging. Experience gained from research supported by Keele Clinical Trials Unit (CTU), shows that targeted Health Informatic (HI) support early in the design phase of clinical studies may enhance the conduct of research and improve recruitment and retention rates. A collaborative approach involving Keele CTU and the NIHR Clinical Research Network: West Midlands (CRN WM) in the use of HI has been developed to embed clinical research within primary care settings.

Background

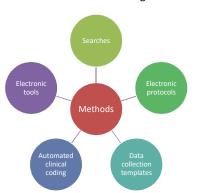
Keele Clinical Trials Unit (CTU) is a UKCRC registered CTU, specialising in the development and delivery of epidemiological studies, feasibility and main multicentre clinical trials, and an increasing portfolio of Clinical Trials of Investigational Medicinal Products (CTIMPs). Keele CTU has a strong HI function, with over 12 years' experience in utilising primary care clinical systems and strong links with CRN WM. CRN WM is one of 15 clinical research delivery arms of the NHS. They are responsible for ensuring the effective delivery of research within the primary care infrastructure throughout the WM area.

Methods

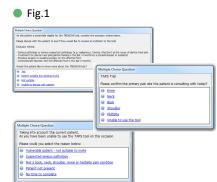
A joint HI Working Group (HIWG) between Keele CTU and CRN WM has been established to oversee, develop, support, track and quality assure the HI operational activity for research. A range of innovative methods have been developed by the working group, which can be embedded into existing GP clinical systems.



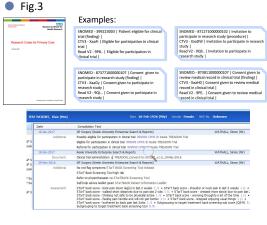
These methods are tailored on a bespoke basis to the requirements of individual clinical research teams to perform feasibility, identification, eligibility, screening, recruitment, tagging and data collection functions and are provided together with instructions for use.



- **Searches** Feasibility, eligibility and recruitment searches to identify eligible patients for research studies.
- Electronic protocols Automated processes which, through a series of decisions and actions, aid patient screening, data entry, information display and auto populated documents (Fig 1).
- Data collection template Electronic tables or document templates to facilitate accurate and consistent data entry (Fig 2).
- Automated clinical coding Ability to record research activity using existing and bespoke study specific Read codes (Fig 3).
- **Electronic tools** Embedded stratification and screening tools to aid referrals and clinical assessments (Fig 4).









Results

100% of Keele CTU supported research activity involving general practices have utilised the HIWG. The groups' innovations assist to implement a robust, standardised and automated, quality assured, method of performing research activity in primary care settings. Greater precision of sample identification, reduced paperwork and increased efficiencies can be achieved, assisting with the retention of research participants, resulting in accessible interrogation and interpretation of research data.

Conclusion

Whilst there is variability in CRN resourcing nationally, the HIWG standardises the conduct of research in primary care settings, improving consistency and engagement with the primary care research infrastructure. Utilising GP clinical systems to embed research tools, results in simple, efficient and effective methods for primary care partners to conduct research. Scaling up of the HIWG over time will allow the group to provide a service for other clinical research teams conducting research in the primary care setting.

Contact details