Exploring the Current Landscape of Intravenous Infusion Practices and Errors (ECLIPSE): A National Study

What different IV administration practices are there in England? What factors increase or reduce the likelihood of error? Do smart pumps deliver safer IV practice?

The purpose of this NIHR (National Institute for Health Research) funded research study is to identify key issues related to errors involving intravenous (IV) infusions and to develop strategies to minimise the incidence of such errors. We will conduct a national study of the frequency and types of errors involving IV infusions, and work with participating hospital sites to review current practices. Our findings will inform future strategy in purchasing, deployment and use of IV medication technology. For example, do smart infusion pumps reduce the likelihood of error? This project has received NHS research ethics approval (NRES Committee South Central - Berkshire B; REC reference 14/SC/0290).

What does the study involve?

- We plan to recruit 16 acute hospitals (including two children's hospitals) and six day care units, representing a range of practices in terms of implementation and use of IV infusion pumps and drug error reduction software.
- We will work with a local site coordinator at each hospital who we will ask to identify a local nurse and pharmacist as observers for the study.
- The two observers will compare the IV medication each patient is receiving with what they have been prescribed; they will be responsible for gathering data, data entry and initial error classification.
- The study will take either 4 or 6 working days for each of the observers and the local coordinator. This depends on the level of involvement from the site. These days can be arranged over a time period that is convenient to staff (e.g. four weeks).
- We will reimburse local staff time at a standard daily rate.
- Our researchers will also conduct follow-up interviews (½-1 hour) with representatives of different roles related to IV administration (procurement, biomedical engineering, training, policy, etc.).
- Findings will be aggregated and anonymised across study sites.

Why take part?

- At a national level: you will be contributing to a national research project that will provide recommendations to improve patient safety across the NHS, and inform the design of devices, ways of working and purchasing and policy decisions.
- At a local level: you will gain insight into your local practices and any associated risks, providing the opportunity to review and improve practice if necessary, as well as making better-informed decisions about future procurement and use of IV medication technology.
- The organisation will be compensated for time spent on the project.

Contact

- Email Dominic Furniss d.furniss@ucl.ac.uk or Imogen Lyons imogen.lyons.11@ucl.ac.uk
- Website: http://www.eclipse.ac.uk

- NIHR HS&DR reference: 12/209/27

Eclipse

NHS National Institute for Health Research

UCL