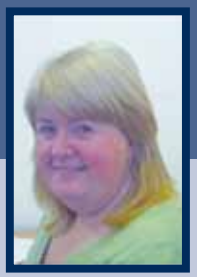
# Diabetes research nursing

**In this regular column, Shona Brearley discusses diabetes research nursing from a practical perspective, with the aim of sharing best practice ideas and giving readers the chance to ask for advice about their particular study. If you have any queries, or would like to contribute to this column, contact jdn@sbcommunicationsgroup.com.**



## The ever-changing role of the diabetes specialist research nurse

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This month's column reflects on the role of the diabetes specialist research nurse (DSRN), how I think this role has changed over the last 20 years and how it may develop in the future.

When I started work as a DSRN, I spent much of my time lurking in the diabetes outpatients' department, trying to identify eligible participants from the information in their paper health records. A recent advancement at that time was the on-site lab testing, which gave a biochemistry result by the time the person was ready to see the doctor. I could then easily identify people who might be suitable for my studies from these up-to-date blood results. Then it was simply a matter of speaking to the individual about participation in the study. Gradually over the years, I built up my own database of people with diabetes who were interested in participating in research. Many of these people were enrolled into long-term trials and visited the research unit every 3–6 months for many years so I was able to develop a relationship with them; this greatly enhanced the satisfaction of my job and fulfilled the "nurse" part of me.

### IT developments

Now electronic health records are used both in the recruitment to trials and in collecting follow-up data. There are several registers in the UK where people can register their interest in participation in research. These registers can then be used to identify eligible participants and speed up the recruitment process. The research nurse can sit at their desk and contact potential participants once they have completed a search of the register. Whilst this can save considerable time, data quality must be factored in. However, in the case of some research registers, which use real-time data, this method of recruitment to trials is highly effective and is a huge advancement in the methodology of clinical trials.

The second use of electronic health records in the capture of real-world data for research purposes is an advance that will change the daily lives of research nurses. In the case of cardiovascular (CV) outcomes, linking to an individual's eHealth record will enable the research nurse to see if that person has had any CV endpoints without the need for a research clinic visit. Many of the traditional Phase III and IV studies will be able to use blood results or blood pressure readings from the eHealth record, avoiding the need for extra visits. For study sponsors, being able to use routinely collected clinical data for follow-up is much less costly than the traditional clinical trial.

I think that this will mean a significant change in the role of the research nurse, from that of ensuring that participants attend all research appointments and collecting the data by means of blood sampling and clinical measurements, to that of the research nurse being able to interrogate the various IT systems that feed data into the individual's eHealth record.

Research nurses will need to be competent with many different healthcare IT systems but I'm not so sure that this way of conducting trials will satisfy the "nurse" part of me. Developing new drugs is prohibitively expensive, so you can understand why many sponsor companies want to use routinely collected data and cut down on participant visits, but I do wonder if maybe some of the intuition that the research nurse has about a participant's condition may be lost with the electronic data capture. For example, in one case it was noticed that one person looked a bit pale and complained of feeling a little sweaty at a routine visit to the research nurse. An ECG was performed by the research nurse, although this was not in the protocol, and the person was found to be in atrial fibrillation.

Perhaps a mixture of the two methods is ideal, with participants attending for visits but with routine data capture and interrogation between visits. Certainly the role of the research nurse has changed over the last 20 years and looks set to keep changing as NHS IT systems evolve. ■