Congratulations! With WREN’s help, you are about to start leading your multi-centre project. We hope this experience will be positive and successful. This document is designed to offer some guidance and tips for planning and undertaking your study.

**Design:**
A good study design will yield reliable and meaningful results. It can sometimes be difficult to work out the best way to design your study, and the optimal method will depend on the type of data you are looking to collect.

Common conditions or simple measures can often be collected prospectively. The advantages of this are that data collection can be standardised and data capture is often better, however patients can be missed as people involved in your project may not always be in work. Rare conditions or longer-term measures often require retrospective data collection. This may be easier as it can be completed around other commitments more easily, but data may be harder to find or less complete. A standardised data collection tool, proforma or spreadsheet is often useful.

Also, think about whether ethical approval is going to be required. Audit, quality improvement and service evaluation projects don’t normally require ethical approval. Any form of novel research, patient identifiable data collection or patient intervention may often require both research & development and ethical approvals before being started. Each hospital will have an R&D department and an R&D clinical lead. It may be worth discussing your ideas with them as part of your study design and planning phase.

Information governance is also an important consideration when data collecting across several hospital sites and health boards. Any patient identifiable data needs to be kept within it’s respective health board unless specific permissions for it’s release are in place. Fully anonymised, untraceable patient data can leave respective health boards. It’s often a good idea to ask your local project contacts to keep a record between anonymised study numbers and respective patient identifiable data on a secure NHS computer within their health board. This helps in case you ever need to go back and re-examine the original data.

Consultant input on any project is always strongly advised. Consult with your current educational supervisor or another consultant in your department to see whether they have any suggestions on the design, and whether they are willing to oversee the project with you. If you are struggling for consult advice, please get in touch with WREN. We can approach consultants for help on your behalf as well.

**Project dissemination:**
When you’re happy with you study design and data collection tools it’s time to spread the word. Along with this document, you should have been supplied with the current WREN consultant network contact details list. These consultant should be able to help find a local contact for you to co-ordinate with to help with data collection in each respective unit. You may also have friends or colleagues who are undertaking the project with you in different centres, but please inform all of
the WREN consultants on the contact list at the start of the project so they are aware of WREN’s activity at their hospital.

You should have also been supplied with a project protocol template document. It is useful at the start of any project to have a formalised protocol. It allows you to have clear study aims and methods, and will help with passing this information on to your local contacts at each unit. Please send your completed project protocol to the WREN consultants when you first make contact. This will help to highlight any local factors that may require adaptations to your study design, as well as ensure consistent information sharing. Please also send it to WREN, and we can place it on our website to help advertise your project. If you are having trouble identifying local contacts, please let us know.

Data Collection:
This can be a difficult time for any project lead, and you may find it stressful not having direct oversight of the data collection in each centre. Trying to maintain regular contact with your data collection team can be helpful to troubleshoot any issues that are being experienced, and to check on progress.

Analysis and Write-Up:
Once you have completed your data collection it will be time to analyse the data. Your project aim, hypothesis and data types will determine the types of data analysis that can be performed. Your consultant supervisor will be able to offer advice on data analysis. Alternatively, please contact WREN and we may be able to offer help and support. Cardiff University also have a statistics support service which you can access if you need help.

It’s also important to consider how you are going to disseminate the results of your project. Many previous projects have led to regional, national and international presentations as well as publications. For service evaluation and quality improvement projects it may also be worth considering presenting them locally or at an event like the Welsh Paediatric Society, or any relevant Welsh clinical networks (e.g. the Wales Neonatal Network Annual Audit Day) so that local policy makers and clinical leads can see your data and effect change. This may give you opportunities to get involved in writing national guidelines, and may lead to changes in clinical practice that you can revisit in the future with a further project to assess changes in care.

We hope that this document has been useful in helping to plan your project. It is by no means an exhaustive description of what is involved, as every project is different and has its own unique circumstances. If you need any assistance, please get in touch with WREN. If we don’t know the answer, we have a range of contacts who can help. We are here to help you to succeed!