

# TOP TIPS FOR THE SUCCESSFUL DEVELOPMENT OF CLINICAL AUDIT DATA COLLECTION TOOLS

Developed by the Irish Clinical Audit Network 2006

## ***Validity***

As in research, the data collection tool should have a high level of 'validity' i.e. it collects the data that it purports to collect. This is why it is important to start with clear clinical audit objectives and use evidence-based standards from the outset.

## ***Reliability***

As in research, the data collection tool should have a high level of reliability, i.e. different personnel collecting the data will record the exact same or highly similar data using the tool.

*Inter-rate reliability:* If data is being collected by many personnel it is important that a check is made to ensure that inter-rater reliability is high.

## ***Sequencing***

Data collection questions should flow logically based on the sequence of events in the data source i.e. patient records etc. If feedback is sought from service users or staff members questions should be worded clearly and follow the same basic principles used in developing research interview schedules.

## ***Quantitative versus Qualitative clinical audit data collection***

Clinical audits can use either quantitative or qualitative data to meet the clinical audit objectives.

- The majority of clinical audits focus on quantitative data. Data collection tools of this type should ensure that clear closed questions are used i.e. Yes/No, Documented/Not documented etc.
- Where qualitative data are required it is necessary to develop data collection questions for use in interviews/focus groups or via questionnaire.

## ***Drafting closed questions***

When drafting closed questions:

- use mutually exclusive options, for example Yes/No; Male/Female
- include an option for all responses, for example Yes/No/Don't know/Not applicable
- where appropriate, give more than two options, for example, 4 or 6 (an even number is better as this may assist selection of the middle option as a default). Reliability tends to rise as the number of options rise.

## ***Presentation***

Ensure that the data collection tool is present in such a way that it is visually appealing to those collecting the data.

- Use standard fonts
- Ensure that the font size is readable
- Do not overcrowd each page – ensure that there is space for recording all relevant information and additional comments

## ***Comments***

Ensure that there is sufficient space for including comments during data collection

## ***Include the date of data collection***

Ensure that the date of data collection is recorded clearly on each data collection sheet. This is particularly helpful when data is collected over an extended timeframe.

### ***Include data collection site***

Include the name (or unique ID code) for the data collection site. This is helpful if data is being collected on several sites or wards etc and will make comparison of data across sites more efficient.

### ***Include data collector***

Include the name of the data collector on each data collection tool. This is particularly helpful when data is been collected on different site or if issues arise at a later stage.

### ***Ensure confidentiality***

It is best practice to ensure that each data collection tool does not include the name of the relevant service user or healthcare professional. A unique ID code should be used. This unique ID can link to a separate list of names/case record numbers etc that should be stored securely and used only in accordance with all relevant data privacy regulations.

### ***Include data collection instructions***

Instructions for collecting the data or using specific codes should be included on each data collection tool. This is helpful if there are several data collectors. These instructions might include items such as: Where to find the specific data or any special instructions regarding the location of data, different codes

### ***Pilot the data collection tool***

Always pilot the data collection tool using a small number of cases.

This will help:

- highlight any difficulties relating to sequencing
- identify missing data items
- identify unclear data collection questions or instructions.

### ***Code each data collection item***

Ensure that each item on the data collection tool is numbered/coded so in order to maximise the efficiency of data entry and analysis.

### ***Keep it simple***

Do not collect data that is not required.

- Avoid the 'I might as well collect this information too now that I have the notes open' syndrome.

### ***Don't re-invent the wheel!***

Check if there is another clinical audit data collection tool that can be used directly or one that requires a minor amount of modification. It is usually less time-consuming to develop a data collection tool than search and adapt tools already available.

Beware! Do not fall into the trap of buying 'off-the-shelf' data collection tools that promise the earth. Most of them can't.

### ***Quality control***

It is useful for a percentage of data collection records to be checked to ensure data accuracy.

### ***Sharing best practice***

Increase the clinical audit knowledge base - share **good** data collection tools and good audit proposal schedule.