Other Sampling Methods

These methods can be useful but may be less representative than random approaches:

- **Purposive sampling** – cases chosen for specific characteristics (e.g. blood group, diagnosis).
- **Convenience sampling** – cases selected because they are easy to access (e.g. donors attending on one day).
- **Quota sampling** – like convenience sampling but ensuring certain proportions of subgroups are included.
- **Consecutive sampling** – all cases included from an agreed start date until the required number is reached.

Sampling Bias

Be careful to avoid bias when selecting a sample.
A poorly chosen sample can skew results and give misleading information.

Example:
If auditing a blood collection process, avoid taking only the first five donors of the day (when staff and donors are fresh). Spread cases across different times and staff to ensure all practice is captured.

Contact Us

For advice or support on any aspect of clinical audit at NHSBT, contact the Clinical Audit Team:

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https://nhsbloodandtransplant.sharepoint.com/sites/Clinical/SitePages/Clinical%20Audit.aspx

Leaflet No. 7

INF:456v3

Effective: 16JUN2026

NHS
Blood and Transplant

How to Select an Audit Sample

This leaflet looks at sample size, population and sampling methods.

Random Sampling Methods

Random sampling methods help ensure the sample is representative of the whole population:

• **Simple random sampling** – select cases completely at random so each has an equal chance of being chosen (e.g. random number generator).

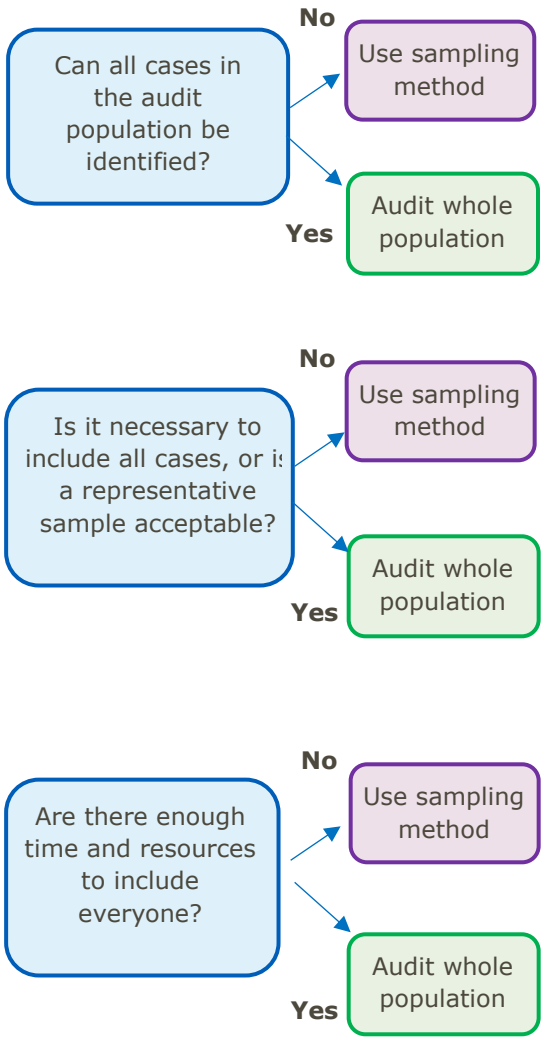
• **Stratified random sampling** – divide the population into groups by shared characteristics (e.g. diagnosis, age, collection team) and select randomly from each group.

• **Interval random sampling** – order the population, select the first case at random, then choose every **n**th case (e.g. every 3rd or 5th donor).

• **Rapid-cycle sampling** – use small samples to identify problems quickly, make changes, and re-audit with further small samples to track improvement.

Population or Sample?

When planning an audit, ask the following questions:



Clinical audit compares a defined aspect of patient or donor care against an agreed standard. The group of patients or donors who have received this aspect of care is the **audit population**.
Sometimes it is possible to include the whole population in an audit, but often a representative sample is used to make the process more practical.

How Big Should the Sample Be?

Clinical audit is **not** research.
While research requires large numbers to compare interventions, clinical audit only needs to determine whether practice complies with standards.
There is no fixed sample size – it depends on:

- The area being audited
- The amount of data required
- How easy data is to collect
- Resources available for collection
- A percentage of your population that will give you assurance in your findings to support a confident conclusion for your data and support action decisions.