

What else do I need to know?

A database is not a universal remedy for the many ailments of data management. However, it is a useful tool that can be customized to your individual needs. Quantitative Health Sciences is available for assistance and can provide support for ongoing or future projects.

Other brochures in this series

- Avoiding pitfalls that result in bad data (2 of 3).
- Guidelines for detecting bad data (3 of 3).

Related brochures

- How Quantitative Health Sciences can satisfy your research needs.
- Sound principles for simple statistics.
- Working with spreadsheets.

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A good database doesn't
mean good data

Database ownership

Brochure 1 of 3

Quantitative Health Sciences was established to provide help in the design and analysis of research studies.

Database ownership

Why do I need a database?

As the unrestricted availability of resources decreases, the urgency of implementing quality outcomes to monitor patient information in the health care setting has never been greater. The need to store and work with patient information can be met through the application of a database.

What is a database?

Traditionally, databases were created using paper forms and stored in a filing cabinet. Databases created in this manner resulted in several problems. For example, imagine a database containing paper forms on hundreds of patients. Locating one form on a specific patient or keeping those forms in order by patient name would be a constant challenge. Moreover, creating reports from a database such as this (for example, preparing a list of all patients on a certain medication at the time of initial visit) would be laborious. Fortunately, there are electronic database programs that allow the creation and management of database information electronically.

Database [dey-tuh-beys]. *A collection of data organized in a manner that allows access, retrieval and use of that data.*

How would I use a database?

An electronic database offers many advantages over a paper database. These advantages include:

- Easy to use.
- Retrievable data.
- Manageable data.
- Easy creation of reports.

Since data is stored electronically, new entries can be made and old entries can be deleted almost instantly. Perhaps the greatest advantage of an electronic database is the ability to locate information quickly. In a database containing hundreds of entries, one specific entry can be retrieved in just seconds.

Additionally, the data can be managed many different ways. In a patient database, specific information on each patient can

be listed and the order in which patients appear (such as alphabetically or by medical record number) can be controlled. The ability to present data is greatly enhanced by an electronic database because of the flexibility provided in generating reports. This flexibility includes generating reports in various standardized formats or designing and creating customized reports.

Who is responsible for maintaining my database?

Once a database has been created and the data entered, it must be maintained. It is your responsibility to maintain your database. This includes modifying the data to keep it up to date (such as adding new patient records), and changing and/or deleting data in existing records. Since you are responsible for maintaining your database, you must become aware of issues that could impact the quality of the data. In addition to adding, changing and deleting records, maintenance of a database periodically could involve the need to change the database structure.