

# ELECTRONIC DATA CAPTURE: DEFINITION, ADVANTAGES AND EXAMPLES



The successful research changes across time and progresses. This change, however, moves in accordance with the advancement of technologies and is also responsive to the requirements of all Good Clinical Practices (GCPs). And since clinical research largely depends on the collection and preservation of data, the methods, tools and systems used are of a paramount importance. Acknowledged as navigators for results, they need to be not only up-to-date but effective too, because being updated is not always an equivalent of being effective. There might be flaws that are simply unavoidable, especially when researchers utilize modern but not efficient techniques. Therefore, selecting the tactics as well as the features for data collection may take the course of clinical studies to one end or another. Keeping the balance between being modern and being efficient is what promises results with minimum shortcomings and maximum satisfaction. Thus, when it comes to data collection the adaptive approach seems to be the best approach. It accommodates equal levels of efficacy and novelty which work together to improve what researchers gain at the end in the form of information. Such approach is precisely the so called Electronic Data Capture (EDC).

What is Electronic Data Capture?

We have already seen the application of technological creations in the Pharma sector. The industry is expanding and seeks new horizons through electronic means, so that the impact of the research

practices is maximized. **Digitalization of clinical research** is not a question, a guess or uncertainty. Not anymore. It is a fact. The quality performance no longer relies on manual labor and human efforts only. Undoubtedly there is something else – the adoption of computer-based developments and mechanisms which function in collaboration with people, while serving their needs. In this sense, more and more clinicians, physicians and research experts choose modernized electronic variants of familiar processes. From **digital recruiting of patients**, through **remote clinical trials**, to **e-learning courses**. Gathering information that is crucial to a trial is part of these processes which also undergo a sort of digitalization. A few years ago, the most basic and most commonly preferred way for data collection used to be the paper-based method. It was considered to be the most beneficial one when trying to provide consistency, security and effectiveness. Nevertheless, seeing that technology may just be the right tool that can help researchers complete their tasks much more easily and quickly, paper-based data collection methodologies slowly transform into a thing of the past. Now they are replaced by Electronic Data Capture systems. EDC systems represent computerized systems that collect data in electronic format. They are used to gather sufficient patient data during the testing of new pharmaceuticals. Some of the most fundamental EDC functionalities comprise of quality checking of already collected data, allowing researchers to enter data into a centralised database and forming web-based data entry forms.

What are the advantages of Electronic Data Capture software?



In simple words, using Electronic Data Capture methods make the work of researchers and staff members smoother and easier. Such systems offer cost- and time-efficient results without compromising on quality. Other benefits of EDC include:

- Data efficiency

EDC systems are designed in a manner that guarantees for the efficiency of the data which is being collected. Edit checks and revisions are installed into the system, enabling researchers to monitor the data and make sure it is in the right format, consistency and range before it is entered into the database.

- Remote and faster access

Another advantage of Electronic Data Capture systems are their ability to provide remote and real-time access to research data. Thanks to this options, researchers can use cloud-based services and can store data online. As a result, this will let them have access to it even when they are not in the office and can reach to informative decisions and conclusions much faster.

Examples of Electronic Data Capture systems

- Medrigo
- Castor EDC
- Aetiol
- DataLabs
- Poimapper

In conclusion, the Pharmacy sector is adapting new electronic-oriented practices just like any other industry nowadays. Trying to deliver better outcomes while utilizing their own work, research specialists are altering traditionally accepted methods and choosing computerized versions instead. Electronic Data Capture software is one such alteration and it seems to be the new trend now that replaces the old-fashioned ways for data collection. It plays a huge role in clinical studies because it offers plenty of advantages such as data efficiency, easier access to already uploaded data as well as cost- and time-efficacy.

*Article originally posted here: <https://crotraining.co.uk/electronic-data-capture-definition-advantages-and-examples/>*