



ABSTRACT

Today's research organizations are moving away from traditional methods of research administration and exploring more efficient systems for conducting and documenting the research process. A major advance in this area is the introduction of eRA – electronic Research Administration – software.

Key Solutions provides a host of integrated software services that can boost the productivity and effectiveness of any research organization. It offers valuable services to simplify and streamline the numerous procedures and practices involved in research administration; some of them are online protocols for research compliance, handling animal resources, grants management, and much more.



INTRODUCTION

Electronic research administration (eRA) is the process of running research projects and handling the management of the same, using paperless and online means. In contrast to the traditional methods of submitting proposals/protocols, keeping records with the help of journals, memos, emails, spreadsheets, etc., eRA works almost completely "paper-free,".

It eliminates the need for additional personnel and cutting through the onerous administrative barriers often faced by researchers. Key Solutions offers greatly streamlined and integrated solutions for all the above problems that researchers currently face.





eRA – the new-age way of research administration

In the past, tracking information about a single research project over the course of many years was a complex and tedious task. Apart from doing actual research work, investigators had to spend their valuable time maintaining and updating records and educating themselves about the changing rules and regulations related to compliance and grants funding.

Though these might be routine responsibilities, their significance for the continuity and credibility of a research project cannot be emphasized enough. Any omission or inaccuracy in the paperwork submitted to reviewers could not only damage the reputation and integrity of the organization, but also the financial health of the project by way of continuing grants.

Recent advances in technology and software related to eRA make a host of tools available to modern research scientists, helping them conduct research management in a hasslefree and productive manner. Here are few of the ways in which eRA can help research professionals:

1. **Research compliance:** Regulations, especially federal ones, are prone to frequent updates and changes. In order to abide by compliance regulations, it is vital to be cognizant of the latest modifications in them, so that there is no misunderstanding at a later stage. eRA software keeps the compliance requirements up to date and eliminates confusion with the various regulatory requirements of different authorities such as IRB, IACUC, SCRO, IBC, RSC and CSC.

Streamlined software modules for protocol approvals provide complete solutions for protocol application, review, and approval. As this software is completely managed electronically, every member of the research team, as well as the IRB members and reviewers have online access to the protocol application.

The module includes features such as protocol submission and approval, meeting agenda, and reports which enhances the usability of the software. Team members, using the email notification system can collaborate with and stay informed of each other's progress.

The compliance software module can be used for varied research areas such as human subjects, animal subjects, bio-safety, stem cell research, chemical safety and radiation safety.



- 2. Grants Management: Financial support is the mainstay of many research projects. To apply for and obtain a grant from a donor is no small feat for a researcher, when there are hundreds of applicants and limited funds available. Hence, it is crucial that the entire process right from selecting an appropriate granting agency, to submitting relevant documents for consideration, to maintaining records of expenditure of the grant money is carried out with utmost diligence. Key Solutions grants management software provides all these benefits, thus leaving the researchers additional time to focus on the actual research work. Listed below are some of the tasks performed by grants management software:
 - Submit applications for open funding opportunities
 - Review, score, and critique applications
 - · View award notifications and submit signed grant agreements
 - Submit change requests
 - Submit progress and financial reports
 - Update CVs and profiles
 - Send correspondence and notifications
 - View active grants
- **3. Conflict of Interest:** The presence of a conflict of interest (COI) can gravely threaten any research project. eRA software can help detect prospective conflicts of interest and thus prevent any hindrances to ongoing research. The electronic system enables all researchers to input and declare any conflict of interest; automatic updates warn the researchers about deadlines for submissions and any changes in the regulations, thus precluding any last-minute surprises. Also, it ensures periodic submission of disclosures, new as well as renewals.
- **4. Animal Resource Management:** In laboratories that use animals for their research, lab animals are an intrinsic part of the infrastructure. The well-being and safety of the lab animals is critical to the continuity and integrity of the research being undertaken. eRA can help in various aspects of management of laboratory animals. Animal Resource Management software can be put to use for the following purposes:
 - Requisitioning animals online.
 - Maintenance of animal cages.
 - Bill generation and invoice services
 - Recording the procedures performed on the animals, the drugs and/or treatments given to the animals as part of the research process.
 - Accurate record-keeping about number, type, and species of animals. Daily census reports are helpful for tracking the growth and addition of animals.



- Recording and monitor the health of the animals. This is very helpful for the veterinarians as well as veterinarian technicians to monitor the health of the experimental animals.
- Software can be downloaded on tablets and PDAs for portability and ease of operation in labs and animal storage facilities. recorded.
- Throughout the entire research project, the history of animal usage can be



Things to remember about any eRA software

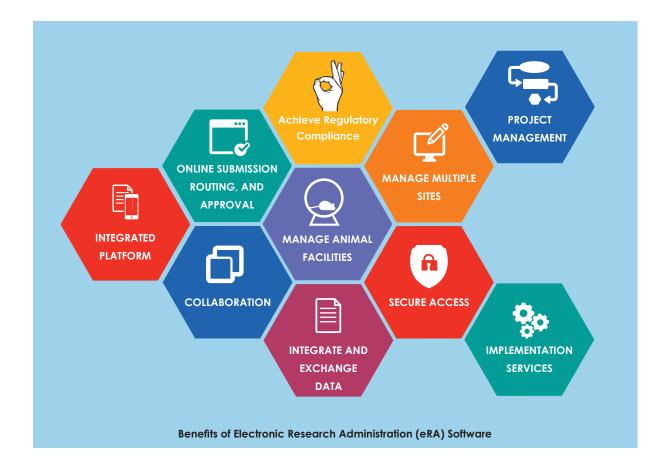
- Most electronic Research Administration software, such as that provided by Key Solutions, is highly capable of integrating seamlessly with other business systems and remote hosting options that may be available already with the research organization. The applications are also compatible with multiple platforms, such as Windows, Java, Unix etc. depending on the particular software. Therefore, it is a convenient and highly cost-effective addition to any existing administration system.
- Research personnel can not only use eRA for one or two aspects of their research management; they may use it for achieving high compliance rates, obtaining data redundancy metrics, or other process deadlines.



Know the hallmarks of exceptional research administration software

- 1. A good eRA software system will be operable on an integrated platform.
- 2. All submissions for approvals (protocols, safety, etc.), the routing of related forms and papers, as well as the actual approval can be done online in a good eRA system. This greatly simplifies the process by eliminating human errors, oversights, and misinterpretations.
- 3. Management of animal facilities becomes very simple and well-coordinated with eRA. Right from estimating the number of animals needed for the research project, ordering them online, keeping track of them, monitoring their health and development, regular cleaning of the cages and storage areas of the animals, ordering food and water and its rationing, to keeping a tally of expired animals and their disposal records. Everything can be easily and precisely recorded and managed with the help of eRA systems.
- 4. A notable feature of eRA is that multiple sites can be managed simultaneously due to the integrated nature of the software. This way, not just one but all connected facilities can be brought on to one platform and all their data coordinated and studied in a concentrated manner.
- 5. With paper records, there is always a chance of accidents and slip ups, resulting in lost records, incomplete filling up of forms, and inaccurate data. All these mistakes can be easily avoided by adopting online methods of research administration.
- 6. When research personnel utilize eRA, their research organization's data can be securely stored online or on other storage platforms without fearing loss or destruction by physical means. Thus, the element of safety and security of research data is reinforced by adoption of eRA.
- 7. Several investigators/researchers can easily collaborate on multiple projects with the help of eRA. Since all research workers, faculty, and principal investigators have access to all the information, data, and tools, they can work together as a team, efficiently with the help of electronic administration systems.





As evident from the above points, implementation of eRA is vital for universities, research hospitals, private enterprise and even some governments to move from their old, paperbased systems to the efficient and dynamic electronic system. eRA is often at the crux of important changes in policy and processes, because of the vital role it plays in compliance today.

Contact Key Solutions by calling us to learn more about the advantages of eRA (electronic Research Administration).

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