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A REDCap application that links researchers, animal facility staff and members of the IACUC in animal health monitoring.

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Abstract

Research studies involving animal experimentation are regulated by the Institutional Animal Care and Use Committee (IACUC). To this end, the IACUC must integrate the information provided by the investigators of each preclinical study and the veterinarians from the animal facility in order to monitor and approve the process. Using a paper-based system to collect animal health and welfare data is a common, albeit time-consuming practice, prone to transcription and reading errors, not to mention inconvenient for veterinarians and investigators wishing to make timely and collaborative decisions when animal welfare is at risk. We created a web-based monitoring system focused on animal health with the potential to improve animal welfare. The data management system is based on REDCap software, which enables data integration in order to offer a solution for animal welfare assessment. The proposed scheme includes key indicators of general health status, such as environment, physical/nutritional information, and behavioral parameters during animal breeding and experimentation, as important components of animal welfare. In addition, the system facilitates communication of this information among researchers, animal facility staff, and the IACUC. REDCap is available to non-profit organizations, and may be adapted and replicated by institutions interested in and responsible for animal care, and used in research. REDCap is an excellent tool for promoting good practices that benefit experimental animal health.

KEYWORDS: REDCap; animal health; animal welfare and ethics; web-based system.