

Enhancing Medical Reporting by Combining Electronic Health Records with REDCap: Applications of the REDCap API

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Electronic health records (EHR) can be a rich source of complex data. Unfortunately, much of the most interesting data is buried in text notes that are not easily parsed into discrete data. Combining the discrete data elements with the non-discrete usually requires a clinician to perform a chart review. Although chart reviews can be costly in terms of time and money, these costs can be reduced by providing clinical staff with narrowly focused patient lists that are prepopulated with the available discrete data from the EHR. This allows the clinical staff to spend more time collecting data that cannot be easily obtained electronically. Providing these lists for clinicians can be done dynamically with ongoing registries to monitor quality of patient care and medical outcomes. The Research *Electronic Data Capture* system (REDCap) and its API provide a mechanism by which select data may be uploaded from the health records to a REDCap database to populate as many informative fields as possible. Clinicians may then focus on the narrowly selected patient population and collect only the data that cannot be queried from the health records. This presentation highlights the process used by the Cleveland Clinic Ob/Gyn and Women's Health Institute to streamline data collection and improve reports on patient management and quality of care using the **redcap** and **RODBC** packages.

References

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