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Can we move forward to Digital Healthcare in Sri Lanka? Developing an Electronic record keeping system to a local Paediatric clinic

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Background: Paediatric multi-disciplinary team (MDT) clinic at Colombo-south teaching hospital is designed for patient-centered management of paediatric neurological disorders. This clinic lacks an electronic database management system (E-DBMS). Open source technology through Google and AppSheet® provides tools to create E-DBMS.

Objectives: To design a user-friendly, secured electronic DBMS for record keeping, audit, data analysis and research purposes.

Methods: New google account was created for the MDT clinic. Google spreadsheets® were used to design the data tables and linked to AppSheet® software to generate graphical user interface of the mobile app of the database. Appearance and features of the App were designed through options provided by the AppSheet® without writing codes using computer language. Once the app is ready, email address and password are shared among the authorized team members and *mobile* app was installed into their phones.

Results: This app enabled the team members to add, edit and view data of MDT patients. Telephone calls could be taken and patients' locations could be accessed through the app.

Since database is accessible through phones, patients' past records could be reviewed and new records can be entered while conducting the clinic. Success of the therapies given to patients can be quantified by motor skills score and AIMS centile analysis. These spreadsheets could be linked to SPSS software to analyze data for research purposes. Even though this provides adequate confidentiality and security to data, all the authorized team members who share the app have an unrestricted access to add, edit or remove data.

Conclusion: Electronic DBMS could be designed practically via AppSheet®, which is an effective tool to maintain and to retrieve patients' record sand for research purposes.

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