BioMedical Computing

Partners since: 2001

Ulster University

The Global Birth Defects Description and Coding (GBDDC) app is for use in areas where local expertise in congenital anomaly diagnosis is scarce to improve the description and coding of externally visible anomalies for surveillance and research.

The challenge

The Global Birth Defects Description and Coding (GBDDC) app contents were prepared by the team at the University of Ulster. Our challenge was to improve the description and coding of anomalies and ensure the app was suitable for use on Apple and Android devices.

We are delighted that the Global Birth Defects App, which… recently achieved a Merit Award in the 4th Commonwealth Digital Health Awards 2020.

The solution

We developed the app that can be used by a wide range of health professionals contributing to birth defect surveillance and research in low resource environments. The solution assists with the description and coding of visible external birth defects and can be used in 'Surveillance' mode which allows registered users to collect additional anonymous / pseudonymised data on cases.

The results

In addition to developing the app, we also created an editable online database of text, images, diagrams and translations which provide the source material for app revisions. This system allows for content revision without the need for changes to the source code and we created an online platform for the management of the surveillance programme registration codes and user accounts and to allow users to download their data.

The App has already been downloaded by people from 38 countries and has won a prestigious international award.