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Repill

Project Abstract

We were initially tasked with 3D printing orodispersible films (ODFs) imprinted with a QR code containing information about the dosage form, in conjunction with the development of a QR-based app for administering the dosage to the correct patient. We identified a niche where ODFs imprinted with QR codes could be utilized. The proliferation of falsified medications, most notably antimalarial drugs, has grown to become an estimated billion-dollar industry across the African continent. We successfully 3D printed sample ODFs as a proof of concept and they turned out to be small enough to consume but the QR codes were still scannable. In conjunction with an app we have developed, patients and doctors will be to scan these QR codes confirming their authenticity. Doctors and patients can also track their medicine intake with the app. Added accessibility features for the app include a screen reader function for illiterate and visually impaired, clear graphics in place of text and the app works even offline.