

## 00550 Systematic Assessment of the Quality of Health Information Dissemination of Smartphone Applications Targeted at People With Diabetes for Medicines Management

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**Aims:** The aim of this study is to systematically assess the quality of health information disseminated through smartphone applications for people with diabetes in medicines management.

**Methodology:** Diabetes-related terms were searched on the Android and iOS app platforms till June 2018. The remaining app titles and descriptions were screened for relevance to medicines management, followed by downloading and assessment against criteria adapted from the Health On the Net (HONcode) principles, which covers the Authoritative, Complementarity, Privacy, Attribution, Justifiability, Transparency, Financial disclosure and Advertising policy of disseminated information on the internet. Apps were further excluded if they were inaccessible or fail to meet the inclusion criteria after downloading. Assessed apps were profiled according to its availability on the Android, iOS or on both platforms. Descriptive analyses were performed on the categorised data.

**Result:** The screening identified 3236 Android and 1640 iOS apps for diabetes self-management. 139 free and paid apps were assessed against the HONcode criteria. 54 and 40 were uniquely available on the Android and iOS platform respectively, and 45 were available on both platforms. Approximately half of the assessed apps met at least 2 of the 8 criteria, while only 3 (2.16%) apps fulfilled all the HON criteria. Apps available on both platforms are more likely to disclose their financial sources (Android: 33.3%, iOS: 47.5%, Both: 80.0%,  $p < 0.001$ ) while apps available only on the Android platform are less likely to have disclaimer on the complementarity of the app (Android: 16.7%, iOS: 42.5%, Both: 44.4%,  $p = 0.005$ ).

**Conclusion:** Majority of the apps assessed do not fulfil the HONcode criteria for health information dissemination. Health information in apps should be regulated as dubious health app sources may be misleading and cause more harm than benefit to the user.