**Additional file 1**: Results from the initial database search

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dates of Search | Search Engine used | Keywords Search | Retrieved articles | Eligible articles |
| 30 Jul 2019 | PubMed | ((((((((((("telemedicine"[MeSH Terms] OR "telemedicine"[All Fields] OR "mhealth"[All Fields]) AND ("technology"[MeSH Terms] OR "technology"[All Fields] OR "technologies"[All Fields])) OR (("telemedicine"[MeSH Terms] OR "telemedicine"[All Fields] OR "mhealth"[All Fields]) AND ("Appl Plant Sci"[Journal] OR "apps"[All Fields]))) OR (("telemedicine"[MeSH Terms] OR "telemedicine"[All Fields] OR "mhealth"[All Fields]) AND applications[All Fields])) OR ("telemedicine"[MeSH Terms] OR "telemedicine"[All Fields] OR ("mobile"[All Fields] AND "health"[All Fields]) OR "mobile health"[All Fields])) AND (("telemedicine"[MeSH Terms] OR "telemedicine"[All Fields] OR "mhealth"[All Fields]) AND ("instrumentation"[Subheading] OR "instrumentation"[All Fields] OR "devices"[All Fields] OR "equipment and supplies"[MeSH Terms] OR ("equipment"[All Fields] AND "supplies"[All Fields]) OR "equipment and supplies"[All Fields]))) AND (("point-of-care systems"[MeSH Terms] OR ("point-of-care"[All Fields] AND "systems"[All Fields]) OR "point-of-care systems"[All Fields] OR ("point"[All Fields] AND "care"[All Fields]) OR "point of care"[All Fields]) AND ("Diagnostics (Basel)"[Journal] OR "diagnostics"[All Fields]))) AND (("diagnosis"[MeSH Terms] OR "diagnosis"[All Fields] OR "diagnostic"[All Fields]) AND accuracy[All Fields])) AND ("sensitivity and specificity"[MeSH Terms] OR ("sensitivity"[All Fields] AND "specificity"[All Fields]) OR "sensitivity and specificity"[All Fields] OR "sensitivity"[All Fields])) AND ("sensitivity and specificity"[MeSH Terms] OR ("sensitivity"[All Fields] AND "specificity"[All Fields]) OR "sensitivity and specificity"[All Fields] OR "specificity"[All Fields])) OR (("health"[MeSH Terms] OR "health"[All Fields]) AND ("occupational groups"[MeSH Terms] OR ("occupational"[All Fields] AND "groups"[All Fields]) OR "occupational groups"[All Fields] OR "workers"[All Fields]))) AND ("africa south of the sahara"[MeSH Terms] OR ("africa"[All Fields] AND "south"[All Fields] AND "sahara"[All Fields]) OR "africa south of the sahara"[All Fields] OR ("sub"[All Fields] AND "saharan"[All Fields] AND "africa"[All Fields]) OR "sub- saharan africa"[All Fields]) AND ("1900/01/01"[PDAT] : "2019/07/30"[PDAT]) | 15,405 | 204 |
| 30 Jul 2019 | EBSCOhost (MEDLINE and CINAHL with full text) | mHealth technologies OR mHealth apps OR mHealth applications OR mobile health AND mHealth devices AND point of care diagnostics AND diagnostic accuracy AND sensitivity OR specificity AND health workers AND sub-Saharan Africa | 1,646 | 110 |
| 31 Jul 2019 | Google Scholar | mHealth technologies OR mHealth apps OR mHealth applications OR mobile health AND mHealth devices AND point of care diagnostics AND diagnostic accuracy AND sensitivity OR specificity AND health workers AND sub-Saharan Africa | 427 | 86 |
| 31 Jul 2019 | Science Direct | mHealth technologies AND mHealth devices AND point of care diagnostics AND diagnostic accuracy AND sensitivity OR specificity AND health workers AND sub-Saharan Africa | 9,185 | 168 |
| **Additional database search** | | | | |
| 08 Mar 2021 | PubMed | mHealth technologies OR mHealth apps OR mHealth applications OR mobile health AND mHealth devices AND point of care diagnostics AND diagnostic accuracy AND sensitivity OR specificity AND health workers AND sub-Saharan Africa | 261 | 42 |
| 09 Mar 2021 | Google Scholar | mHealth technologies OR mHealth apps OR mHealth applications OR mobile health AND mHealth devices AND point of care diagnostics AND diagnostic accuracy AND sensitivity OR specificity AND health workers AND sub-Saharan Africa | 146 | 18 |
| 10 Mar 2021 | EBSCOhost (MEDLINE and CINAHL with full text) | mHealth technologies OR mHealth apps OR mHealth applications OR mobile health AND mHealth devices AND point of care diagnostics AND diagnostic accuracy AND sensitivity OR specificity AND health workers AND sub-Saharan Africa | 841 | 69 |
| 10 Mar 2021 | Science Direct | mHealth technologies AND mHealth devices AND point of care diagnostics AND diagnostic accuracy AND sensitivity OR specificity AND health workers AND sub-Saharan Africa | 2,065 | 51 |