

### *Methods for literature search, information sources, abstraction and synthesis*

#### Search Strategy

To compile the list of documents meeting inclusion criteria, a literature search was conducted using bibliographic databases and hand searching of online websites for peer reviewed articles and grey literature that highlight the use of digital health technology to advance family planning in LMICs from June 2016 to present.

#### Electronic Databases

The following electronic databases were searched for journal articles and grey literature:

- PubMed
- POPLINE
- Cochrane Database of Systematic Reviews (CDSR)
- Cochrane Central Register of Controlled Trials (CENTRAL)
- African Journals Online
- Cumulative Index of Nursing and Allied Health (CINAHL)
- Science Direct
- Inter-Science (Wiley)
- Web of Science
- African Index Medicus
- Latin America and the Caribbean (LILACS)
- Index Medicus for the Eastern Mediterranean
- Western Pacific Region Index Medicus

For additional grey literature, online searches of 21 websites containing relevant family planning program interventions/information were conducted.

#### Search Terms

Electronic database searching was conducted based on combinations of digital health, family planning, and health systems strengthening concepts. Additional limits for publication date, language, and availability of abstract were also used. The table below shows the concept and search strings used. Variations of search strings were used depending on the resource.

Concept	Terms	String
Adolescents	adolescent, adolescents, youth, young people	"adolescent" OR "adolescents" OR "youth" OR "young people"
Family Planning	family planning, contraceptive, contraceptives, contraception, reproductive health	"family planning" OR "contracept*" OR "reproductive health"
mHealth		"mHealth" AND ("family planning" OR "contraception")
Digital Health		"digital health" AND ("family planning" OR "contraception")

Concept	Terms	String
Digital Health		"digital health" AND ("family planning" OR "contraception") AND "cost" "digital health" AND ("family planning" OR "contraception") AND "scale" "digital health" AND ("family planning" OR "contraception") AND "sustainability"   "digital health" AND ("family planning" OR "contraception") AND "efficiency"   "digital health" AND ("family planning" OR "contraception") AND "health systems strengthening"
Digital Health	HSS terms with family planning included in search	"digital health" AND ("family planning" OR "contraception") AND "supply management"   "digital health" AND ("family planning" OR "contraception") AND ("workforce development" OR "performance support")   "digital health" AND ("family planning" OR "contraception") AND "family planning" AND ("financial transactions" OR "financial incentives")   "digital health" AND "family planning" AND "service delivery"   "digital health" AND "family planning" AND ("health information systems" OR "HIS")   "digital health" AND "family planning" AND ("health management information systems" OR "HMIS")
Additional Limits	June 2016 to present, no commentary or opinion articles, English language only	

## Bibliography

Below is a complete list of citations identified from the literature search process described above. A subset of these references were used to support the development of the Digital Health for Systems HIP Brief. The complete brief and reference listing is available from: <https://www.fphighimpactpractices.org/briefs/digital-health-systems/>

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The HIPs represent a diverse and results-oriented partnership encompassing a wide range of stakeholders and experts. As such, the information in HIP materials does not necessarily reflect the views of each co-sponsor or partner organization.