

Ethics and digital health: What is the purpose of a digital health system and what must be its ethical commitments?

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Key points

- We don't talk enough about the purpose of a data aggregation activity
 - "Digital health" is not a monolithic activity
 - Why does that matter, ethically?
- Wide range of ethics issues in digital health
 - (aka, much more than privacy and security)
- Essential to keep promises to stakeholders
 - But what promises should be made?



Purpose of a digital health activity

Why are digital health data being collected?

- What is the purpose or reason for creating this data system?
- To support care in a larger enterprise (e.g., "learning health system"- housed entirely within a health system) or stand alone data system or research getting and sharing data externally?
- Will data be shared externally? Commercial interest in data?
- System model may be relevant to whether any direct benefit is expected for those whose data included?

• E.g., models

- Learning health system
- Federal research programs/consortia (e.g., AoURP)





(at least some of the...)

Ethics considerations in digital health

- Transparency
- Consent and permissions
- Privacy and security
- Data access and sharing
- Ownership and governance
- Justice and fairness
- Benefits and purpose

Ethics considerations in digital health-2

Transparency

- Of course, but about what topics? (e.g., all of below?)
- Meaningful? Understandable? Format?

Consent and permissions

- About what?
- Meaningful? Opt outs?

Privacy and security

- Meet and constantly upgrade to current best practices?
- Transparency about which data are collected? Shared?
- Transparency about what is identifiable? Defined how?



Ethics considerations in digital health-3

Data access and sharing

- Who has access and why? To improve health of data contributors or others like them? To commercialize? With what protections to meet all other ethics standards?
- Transparency about all of above

Ownership and governance

- Who makes all of these decisions?
- Any engagement or governing board of



Ethics considerations in digital health-4

Justice and fairness

- Whose data are included? Intentionality in this?
- What inferences can be drawn from data? (who benefits from this system and what's learned?)
- Which questions are examined? Require dedicated consideration of least well off?

Benefits and purpose

- Do participants benefit? (P.S. Learning useful health info doesn't mean participants benefit)
- Do participants know data system purpose?



Promise keeping, trust, and integrity

- Integrity and trustworthiness require promises to participants to be kept
 - Any not kept must transparently be disclosed and explained
- Key is which promises to make
 - Commitments to transparency
 - Commitments to getting one's results
 - Commitments to ongoing engagement
 - Commitments to investigating health problems of those least often studied