Privacy in Mobile Technology for Personal Healthcare

PRESENTED BY ZIWEI LIU

Avancha, S., Baxi, A., & Kotz, D. (2012). Privacy in mobile technology for personal healthcare. ACM Computing Surveys (CSUR), 45(1), 3. doi: 10.1145/2379776.2379779 "Health information privacy is an individual's right to control the acquisition, uses, or disclosures of his or her identifiable health data"

- US National Committee for Vital and Health Statistics

Why care about who gets data? How can we create well designed consent systems?

Why care about who gets data?

Patient health data is valuable

- Vast amount of information
- Broad range of information
- Useful to many different groups

Why care about who gets data?

Many threats, severe consequences

- Identity threats
- Disclosure threats
- Access threats

Complexities of Healthcare

Limited control due to health architecture and existing privacy laws

Variations in medical circumstances

Complexities of Consent

Differing personal/cultural views on privacy

Balance between achieving tasks and keeping privacy

Conceptual Privacy Framework

- 1. Openness and Transparency
- 2. Purpose Specification
- 3. Collection Limitation and Data Minimization
- 4. Use Limitation
- 5. Individual Participation and Control

And a few others...

Alternatives to consent?

Contexual integrity over consent

New solutions/challenges due to changes in technology, law and culture