

Digital Transformation of Healthcare

Data Sources

Michael Snow, MD PhD, Glen Ferguson, PhD

Center for Health Data Innovations

Objectives

- What other kinds of data can be useful to a study (in addition to those generated by the hospital)?

- What other kinds of data can be useful to a study (in addition to those generated by the hospital)?
- What are the different ways to get that data?

Digital Transformation of Healthcare

2018-09-05

Ancillary Data Sources

- What other kinds of data can be useful to a study (in addition to those generated by the hospital)?
- What are the different ways to get that data?

- Other Data - Weather data, public health records
- Try to find that data live (csv, api, scraping), can you trust the data source?
 - Weather - download data, weather underground, wunderweather
 - Twitter - api
 - football - scraping (ethics of scraping)
 - Other - ilinet (flu view) pdfs (new york state influenza surveillance)

- What devices can we use?

- What devices can we use?
- What information can we get from patients, using these devices?

- What devices can we use?
- What information can we get from patients, using these devices?
- What information should we get from a moral standpoint?

- What devices can we use?
- What information can we get from patients, using these devices?
- What information should we get from a moral standpoint?
- What information do we want and how often do we want it?

2018-09-05

Digital Transformation of Healthcare

└ Mobile Health Overview

- What devices can we use?
- What information can we get from patients, using these devices?
- What information should we get from a moral standpoint?
- What information do we want and how often do we want it?

- Phones, computers/internet, alexa/google home, smart watches
- passive vs active data collections

- What elements do you have to consider when designing mHealth applications?
- What are the technical (backend) issues?

└ mHealth Usability

- What elements do you have to consider when designing mHealth applications?
- What are the technical (backend) issues?

- Some of the main components of usability are - learnability, efficiency/speed, memorability, low error rate, satisfaction
- interoperability, data security, confidentiality, integration with current health care systems