Functional Standards

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Session Outline

- Functional standards
- System development process: how to communicate your needs to developers
- Documenting functional requirements
- Final assignment
Section A

Functional Standards
Health IT Standards Categories

- Data standards
  - E.g., vocabularies and terminologies

- Information content standards
  - E.g., Reference Information Models (RIMs)

- Information exchange standards
  - E.g., messaging standards

- Identifiers standards
  - E.g. National Provider Identifier (NPI)

- Privacy and security standards

- Functional standards and business processes standards
  - E.g., processes/workflow

- Other
  - E.g., IT standards

To date, the main focus of the standard development activities has been on:
- Data standards (vocabularies and terminologies)
- Information content standards (data representation, RIMs)
- Messaging
- Infrastructure standards
National Biosurveillance Use Case

- Charge: “transmit essential data from electronically enabled healthcare to authorized public health agencies in real-time”
## National Biosurveillance Use Case

- **Data Standards** — 28
- **Information Content Standards** — 17
- **Information Exchange Standards** — 46
- **Identifiers Standards** — 11
- **Privacy and Security Standards** — 5
- **Functional Standards** — 0
- **Other** — 0

**TOTAL = 107 standards**

Functional standard: communicating your needs to developers
How the client explained it

How the project officer understood it

How the analyst designed it

How the programmer wrote it

How the sales rep described it

How the project was documented

What operations installed

How the customer was billed

How the project was supported

What the client really needed

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Functional Standard

- **Functional standard** describes work processes that support data exchange between users (e.g., clinicians and public health practitioners) in a format of *functional requirements specification* for electronic communication between settings (e.g., clinical and public health settings)
Functional Standard

- **Functional standard** is a vehicle to assure that the *work processes of stakeholders* (e.g., clinicians and public health practitioners) related to the electronic data exchange *are well understood and agreed upon by stakeholders themselves* and then *communicated clearly to the developers* as functional requirements (functional standard) for the information system.
The functional standard serves as a foundation for the implementation of all other standards.

To date in the United States, there is no consensus on the format, content, and approach for how to specify the functional requirements (functional standards).
I'll need to know your requirements before I start to design the software.

First of all, what are you trying to accomplish?

I'm trying to make you design my software.

I mean what are you trying to accomplish with the software?

I won't know what I can accomplish until you tell me what the software can do.

Try to get this concept through your thick skull: the software can do whatever I design it to do!

Can you design it to tell you my requirements?