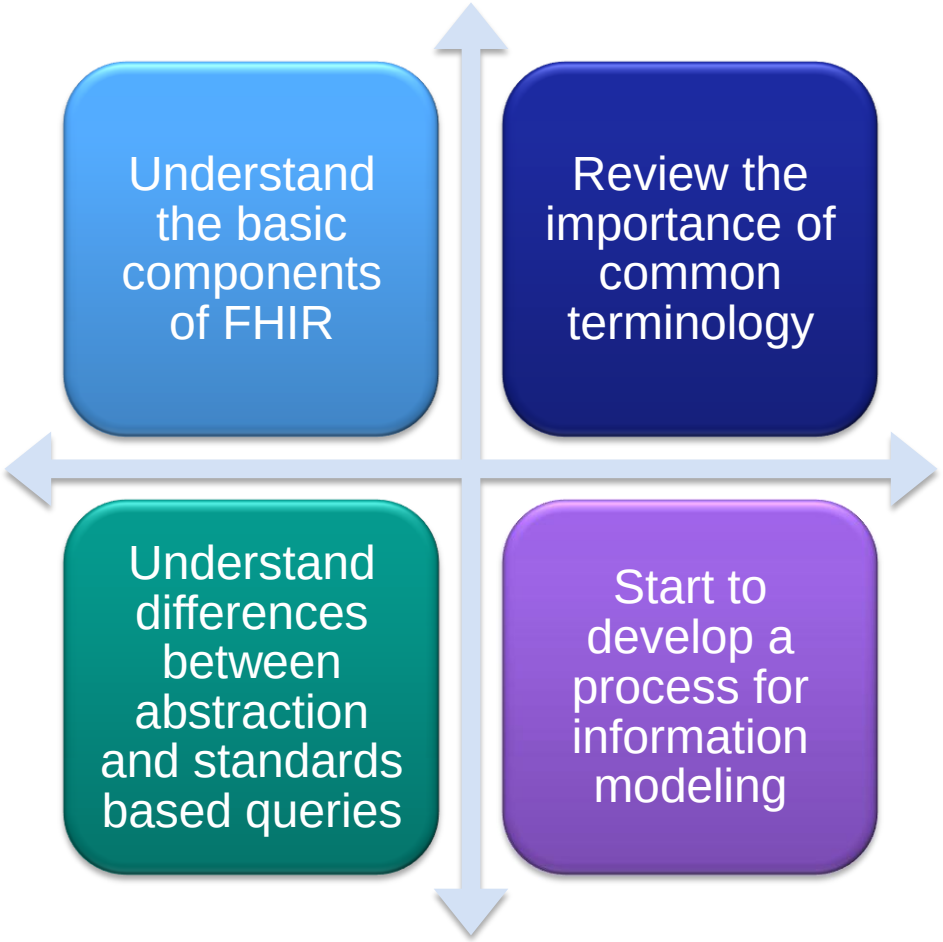

# Partners in Interoperability: Clinicians

Russell Leftwich, MD
Senior Clinical Advisor, Interoperability

InterSystems®
Health | Business | Government

# Objectives



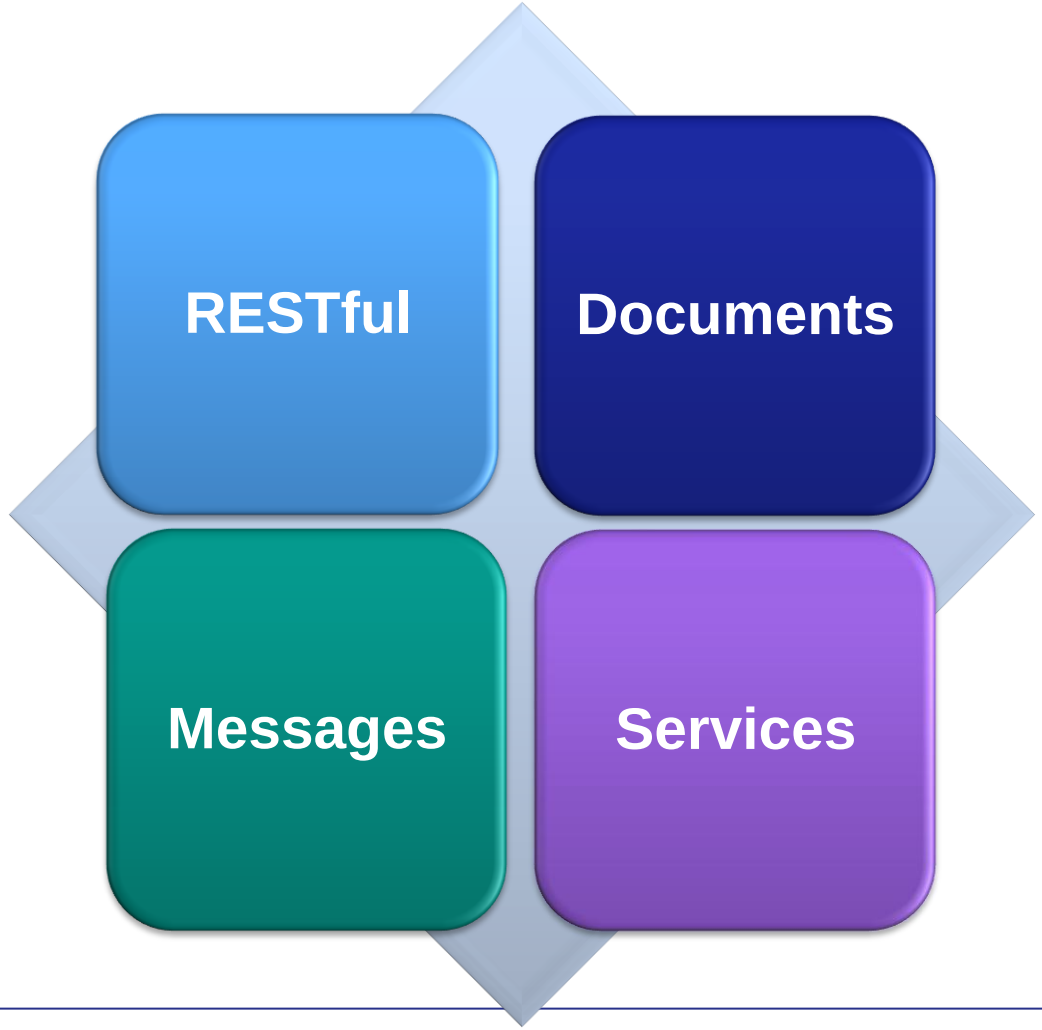
# HL7® FHIR®

- Fast
- Healthcare
- Interoperability
- Resources



# FHIR Supports 4 Interoperability Paradigms



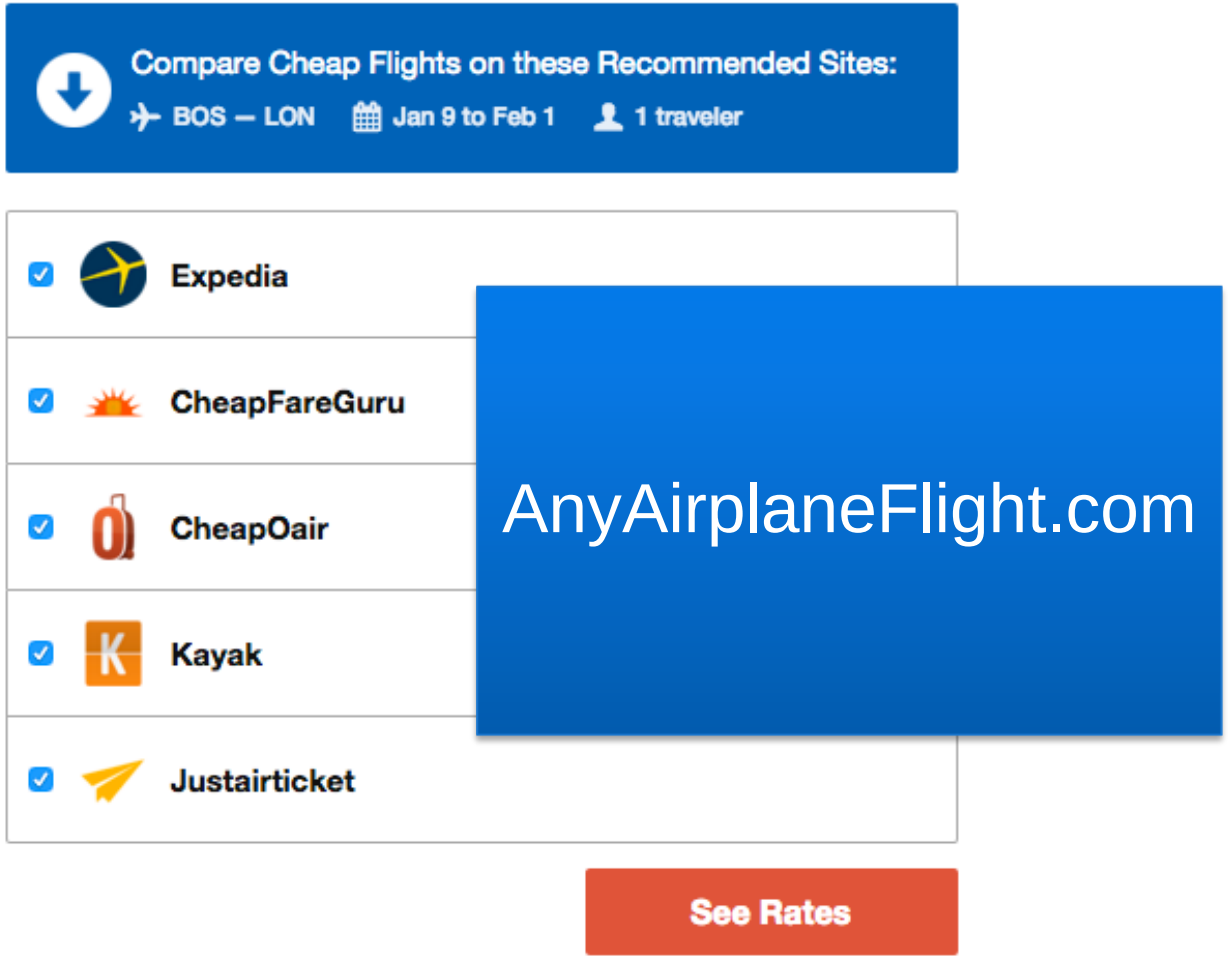

 

# REST

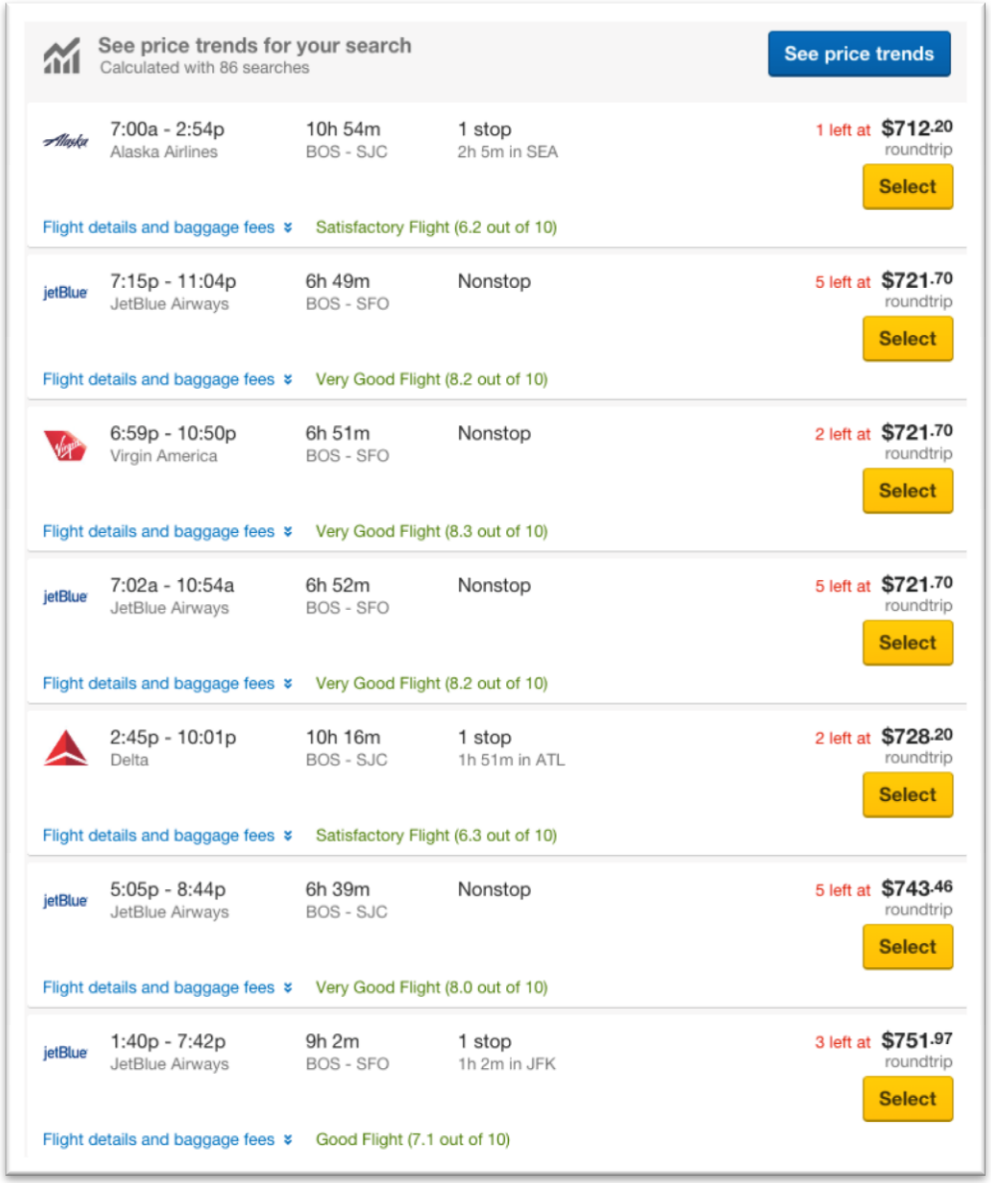
- REpresentational State
- Google, Twitter, FaceBook
- Your favorite travel website

# Your favorite travel site

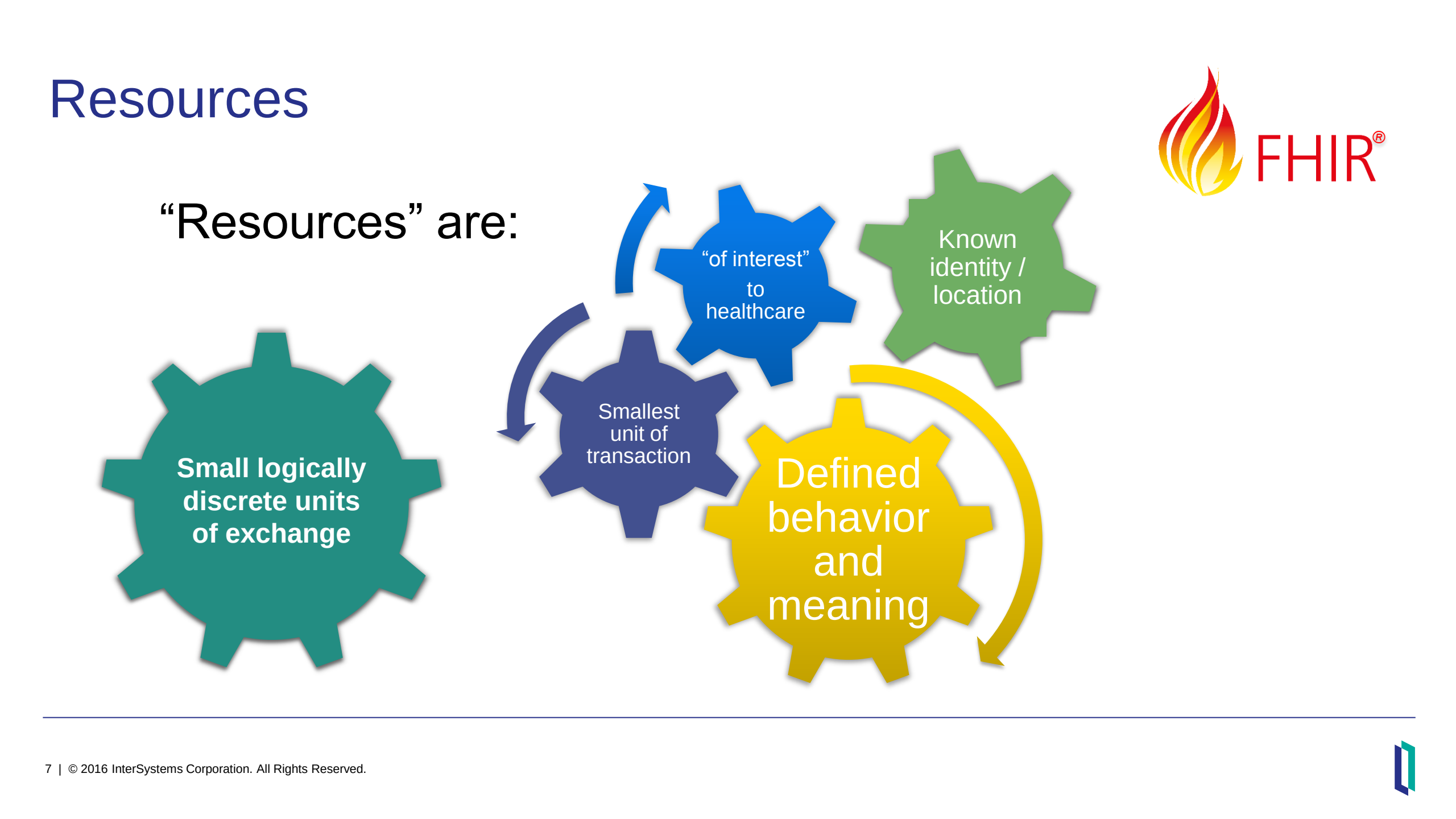



AnyAirplaneFlight.com



# Resources




"Resources" are:



# What's a Resource?

## Examples

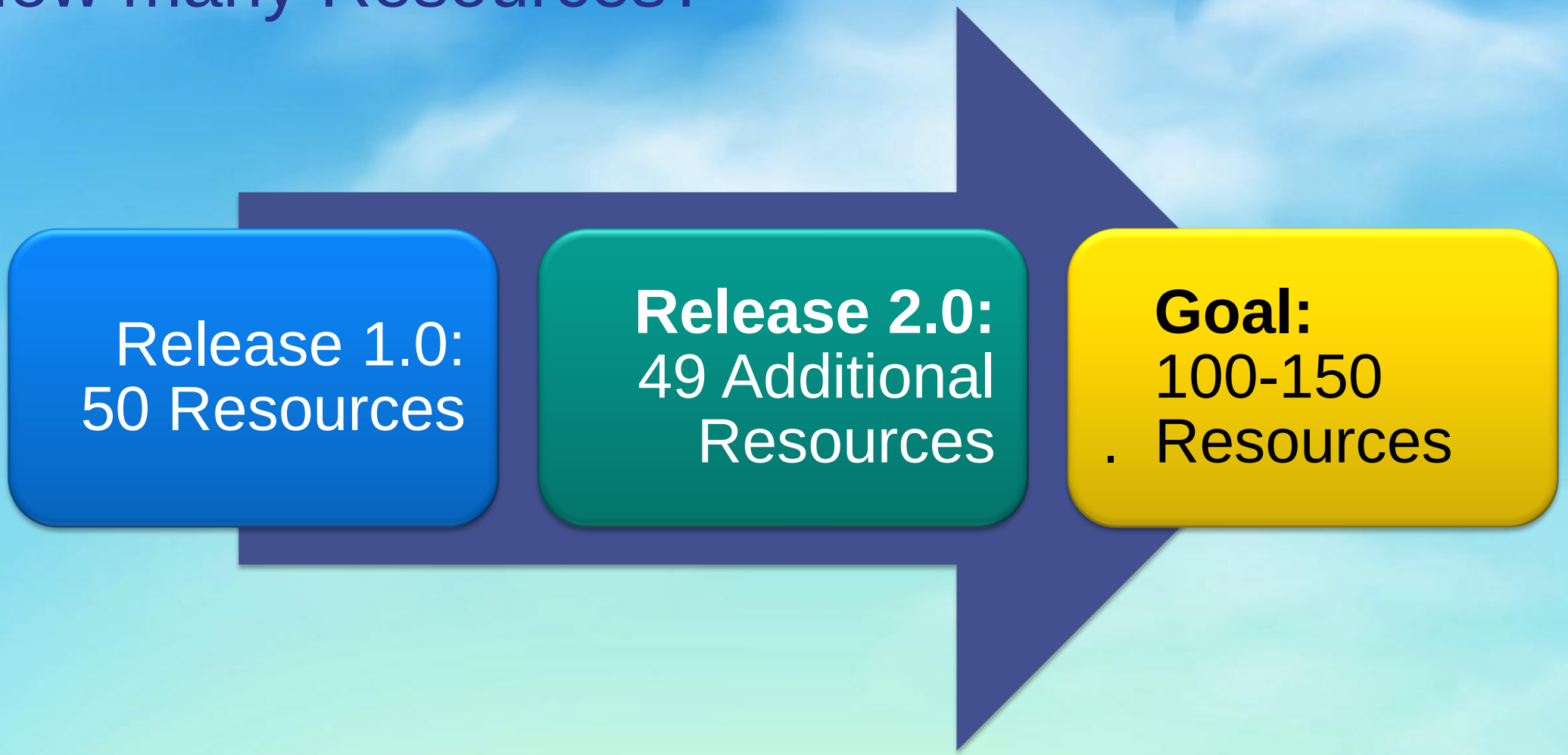
- Administrative
  - Patient, Practitioner, Org
- Clinical Concepts
  - Allergy, Condition, Family History, Care Plan
- Infrastructure
  - Document, Message, List

## Non-examples

- Gender
  - Too small
- History & Physical
  - Too big
- Blood Pressure
  - Too specific

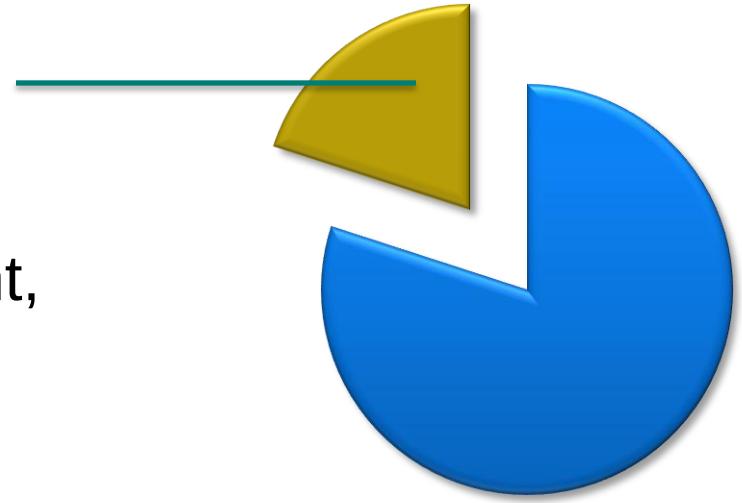
# How many Resources?



# FHIR Extensions: 80/20 Rule

FHIR Resources have data elements if
**80%** of existing systems include them

Extensions are the other **20%**



- Meet specific use cases
- The encoding looks no different,
  just not in the standard

Do it in your organization, but doesn't scale

# FHIR Profiles

## Profiles are implementation guides

- Built for specific use cases
- Encompass the entire scenario

## Profiles include entire implementation

- Multiple Resources & Extensions
- Vocabulary/terminology/code binding

## Interoperability is in using the same profile

- FHIR servers with public access to Profiles

# Ah-ha moment on FHIR

**Regardless of paradigm <u>the content is the same*</u>**

**It's straight-forward to share content across paradigms**

e.g. Receive a lab result in a message.
Package it in a discharge summary document

**It also means constraints can be shared across paradigms**

e.g. Define a profile for Blood Pressure; use same resources in messages, documents, REST and services

*** Ah-ha!!**

# Timeline for FHIR development

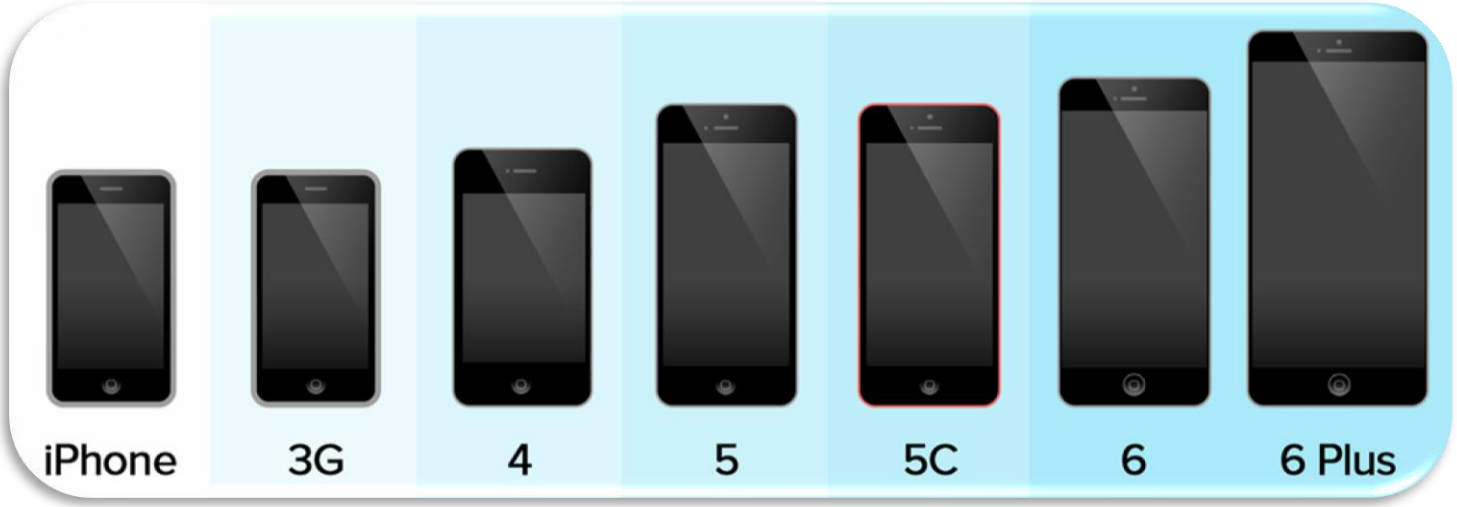

www.FHIR.org

*Standard for Trial Use

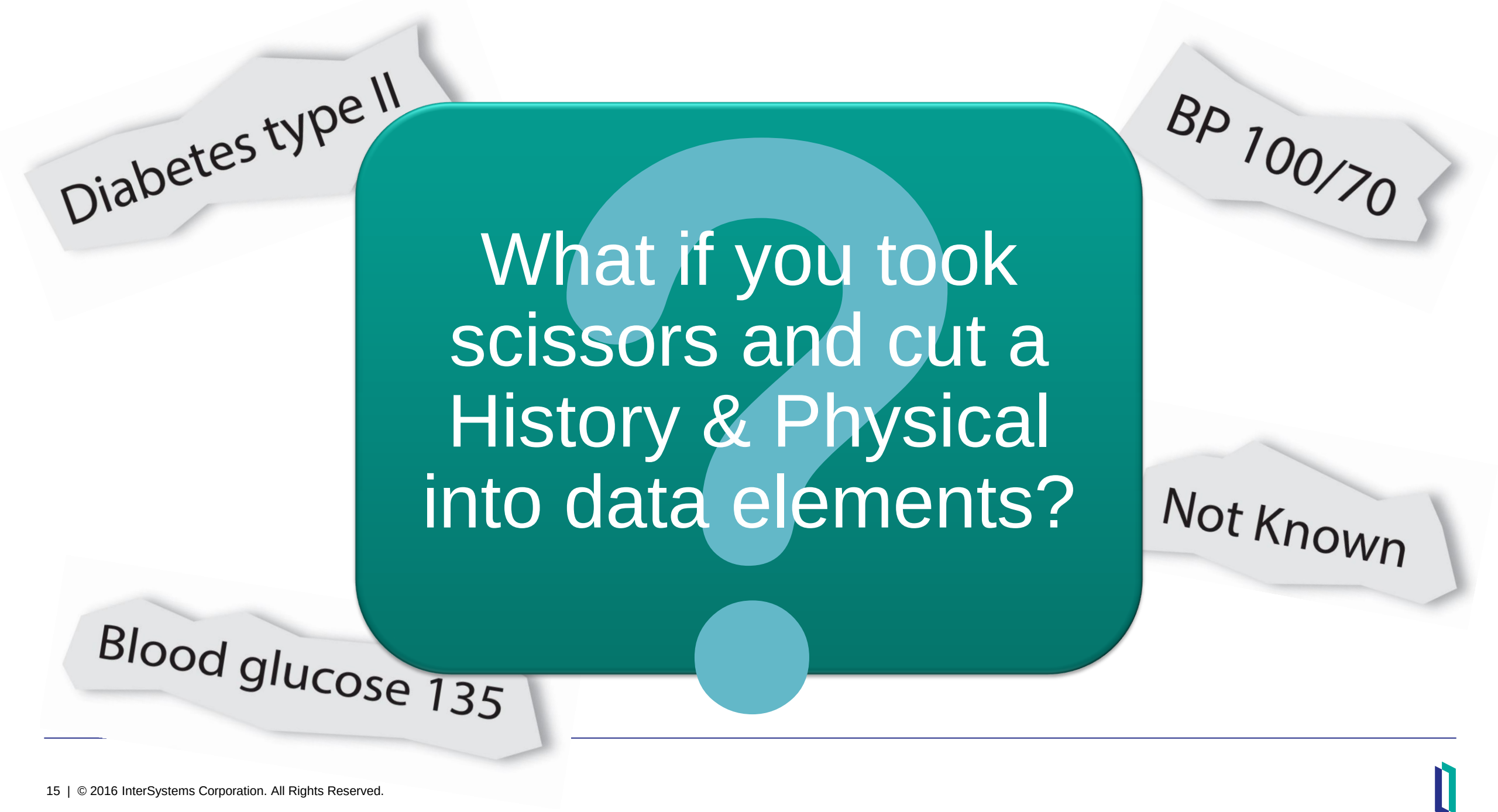
 

# iPhone Maturity Model

- People purchased and used the iPhone 2
- It did not have all of the features of iPhone 3
- Some features were improved, some were added
- iPhone 6 is even better, but you can still use earlier iPhones

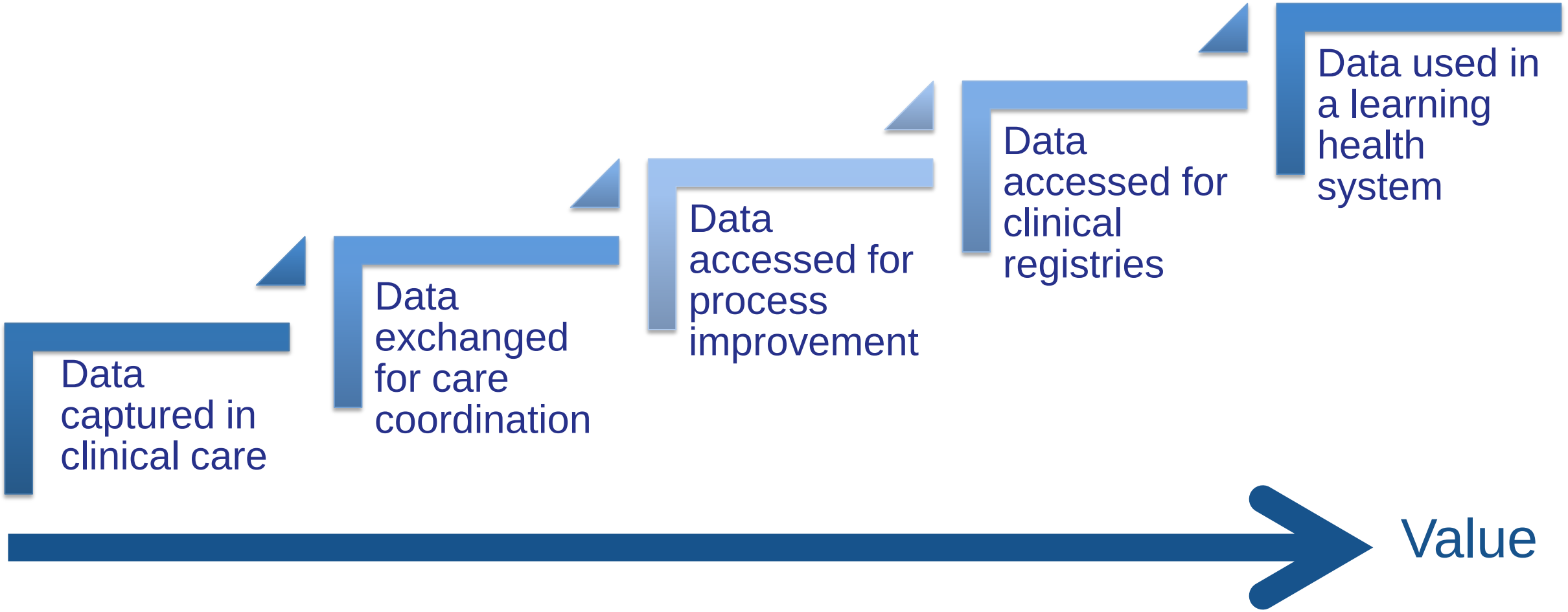




# Leveraging Data Collected in Clinical Care



# Clinical Information Models and FHIR Profiles