

# Health IT Mobile Device Use Case #1

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## Goal

The goal is to provide solutions that allow healthcare providers to securely maintain and exchange clinical information using mobile devices.

The NCCoE is asking collaborators to provide the following:

- A narrative depicting a common use exchanging clinical information using a mobile device.
- An Architectural Objective
- Assumptions
- An Abstract Architecture
- A Dataflow diagram with roles and cybersecurity considerations; and
- A description of the vendor's solution.

Below is an example narrative.

## Example Narrative

Dr Smith is an independent, primary care physician who uses her mobile device to perform a variety of reoccurring activities such as:

- Sending a referral (e.g. clinical information to another physician);
- Sending an e-prescription;
- Receiving a lab result;
- Sending a patient lab results and instructions to see a specialist;
- Checking a patient into a hospital under Dr Smith's care;
- Sending or Receiving consultation Information;
- Requesting a hospital to discharge a patient;
- Viewing hospitalized patient's charts; and
- Ordering an imaging test.

## Example Architectural Objective

Mobile Device -> Clinical Data Store/Electronic Health Record/Processing System -> Mobile Device

## Example Assumptions

- One or more mobile devices used in the transaction.
- The transaction interacts with a certified Electronic Health Record (i.e., listed on the HHS/ONC Certified Health IT Products List).

## Example High Level Abstract Architecture

A physician uses a mobile device to push clinical information to an (EHR) and allows another physician to access the clinical information using a mobile device.



- 1) Physician uses a mobile device application to send a referral to another physician.
- 2) Application sends the referral to a server running a certified EHR application.
- 3) Server routes the referral to the referred physician.
- 4) Referred physician uses mobile device to receive the referral.

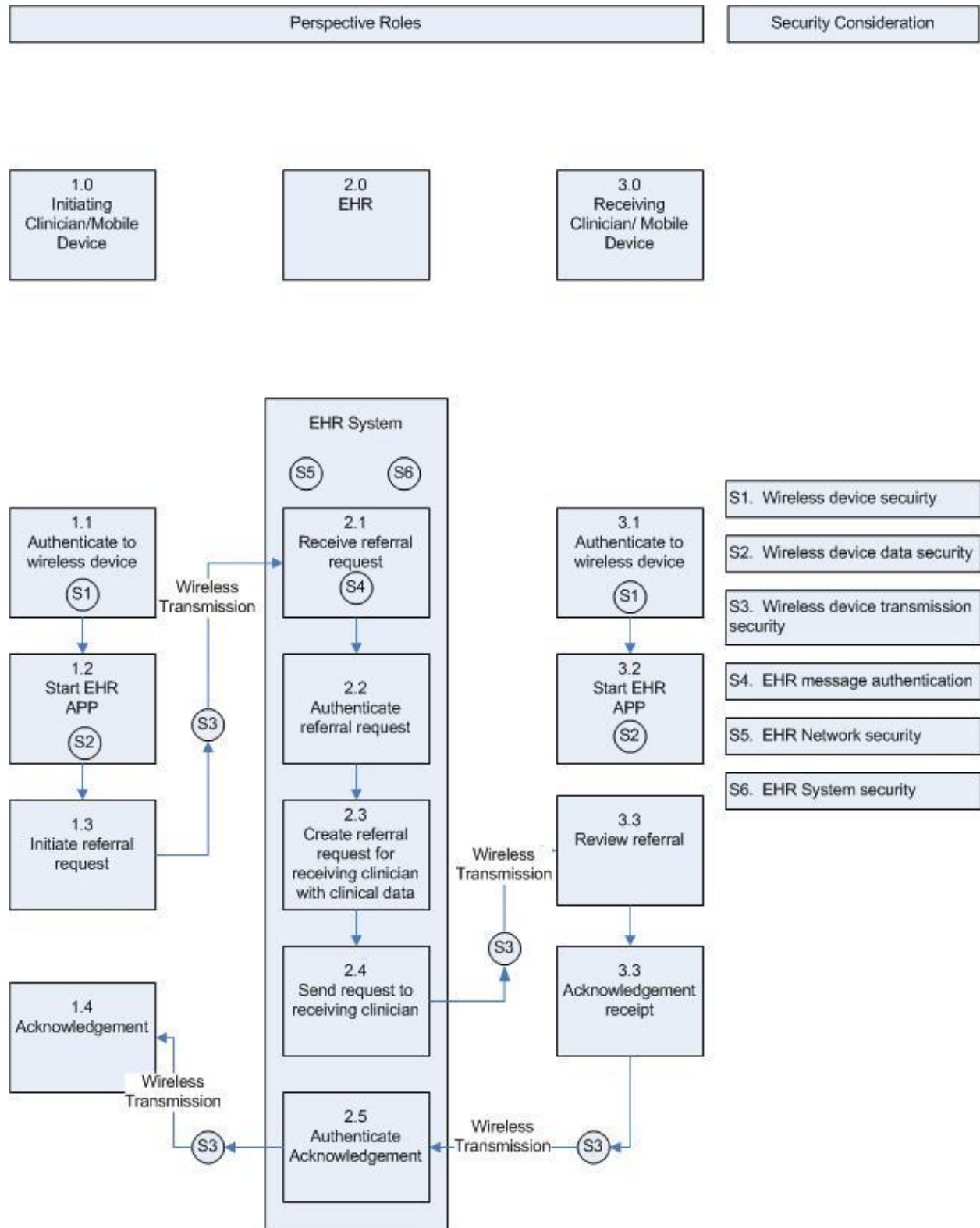
## Example Data Flow Diagram

The Data Flow diagram illustrates one of many possible solutions by exhibiting perspective roles, the movement of information, actions and cybersecurity considerations. The data flow is an example of a possible solution; however solutions do not have to be limited by this example.

The diagram shows a swim lane example of identifiable perspective roles, data exchanges, and cybersecurity considerations.

Cybersecurity considerations should be considered throughout the entire system.

# Health IT Use Case Scenario



## Response Considerations

Abstract Architecture: In your response provide an abstract architecture for your scenario. The architecture must contain

The NCCoE needs a response that contains:

- A well thought out architecture that addresses the cybersecurity requirements.
- IT, HIT, and cybersecurity standards.
- Specific product names that are being proposed.

Requirements:

- Integrity of mobile device is maintained
- Secure transmission.
- Protected Health Information (PHI) is maintained