Workshop on Medical Device Interoperability: Achieving Safety and Effectiveness

Person Centered Mobile Health Use Cases

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Traditional methods of healthcare delivery are increasingly being augmented by health information technologies that focus on remote patient monitoring, telehealth and mHealth.

These solutions rely on wireless connectivity, interoperability and mobile broadband. Connected care will be more and more vital to meet the global demand to deliver efficient and affordable healthcare.

Ensuring safety is paramount in the delivery of care.

The mobile phone is arguably the most pervasive and personal device. Hence it has the potential to be an effective tool to enable Connected Care.

Wave 1

Wave 2

Wave 3

What next?

Voice only

Voice + SMS

Voice + Messaging + Data

- Emails
- Music
- Video
- Instant Messaging
- GPS / LBS
- Social Media
- Mobile Banking
- Mobile Wallet

Potential use case 1 – A Medical Device using a Mobile Phone as a conduit
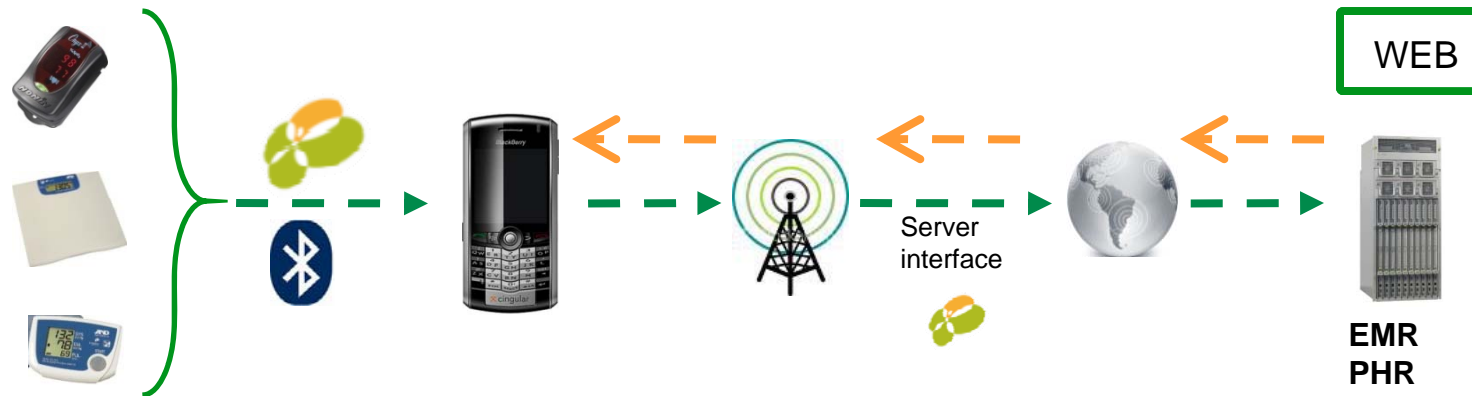
EMR
PHR

Server
interface

Role of mobile:

- Read data from medical device
- Store data on the mobile
- Upload data to PHR/EMR

What, if any, becomes a medical device?

Potential use case 2 – A Medical Device using a Mobile Phone as a conduit and display data processed by the WEB and sent back to the mobile
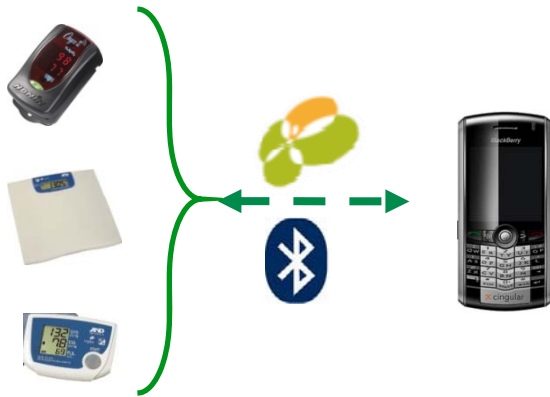

Role of mobile:
- Read data from medical device
- Store data on the mobile
- Graph data on the mobile
- Upload data to PHR/EMR

Role of Web (EMR/PHR):
- Check for "out of range"
- Sends analysis to a mobile device and the mobile device provides Graphs, Alarms and Alerts

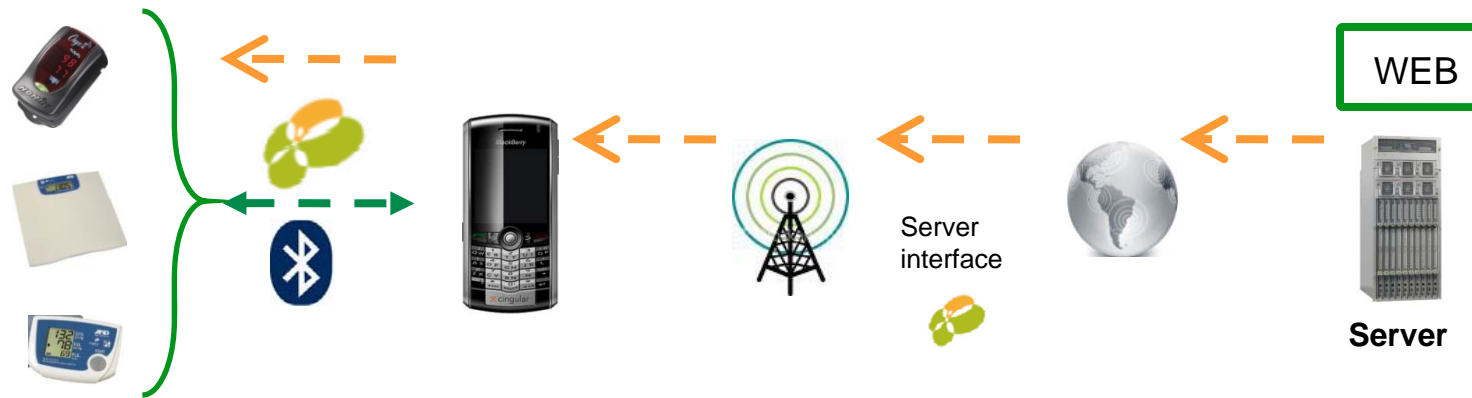What, if any, becomes a medical device?

Role of mobile:

- Read data from medical device
- Store data on the mobile
- Graph data on the mobile
- Check for "out of range"
- Provide Alarms and Alerts using the mobile device

What, if any, becomes a medical device?

Potential use case 4 – A Mobile Phone as a conduit to push S/W to a Medical Device

WEB

Server interface

Server

Role of mobile:
- Read data from medical device
- Upload data to a server

Role of Web:
- Download new Software update to the mobile device for delivery to the medical device

What, if any, becomes a medical device?

- Mobile phone can be an attractive platform for the delivery of care.

- There are 4 primary functions involved in delivery of care – collection, display, processing and software updates.

- Mobile phones can be used for many applications from education, to monitoring to diagnostics to treatment and it would be beneficial to build collaborative, nimble and flexible pathways to ensure safe and effective guidelines.

Thank you