Why International eHealth Standards ?

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Orange Healthcare

objectives: for joining up healthcare

- **modernize the healthcare infrastructure** and equip healthcare facilities with communications solutions
- **connected medicine** for management of healthcare information
- **expertise in communications** to enable healthcare professionals to increase patient comfort and peace of mind

Developing healthcare ICT solutions in 3 areas

Services for professionals	Remote monitoring	Preventive services
Professionals-to-professionals	**Professionals-to-patients**	**Patient**
Infrastructure for coordination, collaboration, and information flow	**Patients keep in touch with healthcare professionals**	**improve prevention by self-management**

Sharing of medical images

Remote cardiac monitoring

Drug authentication

Working with recognized leaders

Manufacturers

SORIN GROUP
MEDASYS
doro
iplato
Alcatel·Lucent
GE Healthcare
TRIBVN
TELUS
cisco
SANOFI
QUALCOMM LIFE
Deutsche Telekom

Elite schools

EHESP
INSTITUT LÉONARD DE VINCI
ECOLE CENTRALE D'ELECTRONIQUE ece GROUPE ECE
SciencesPo.
Chaire Santé
SUP'COM

Professionals

@NTIM
agduc
CALYDIAL
Pedigree
CliCk Diagnostics

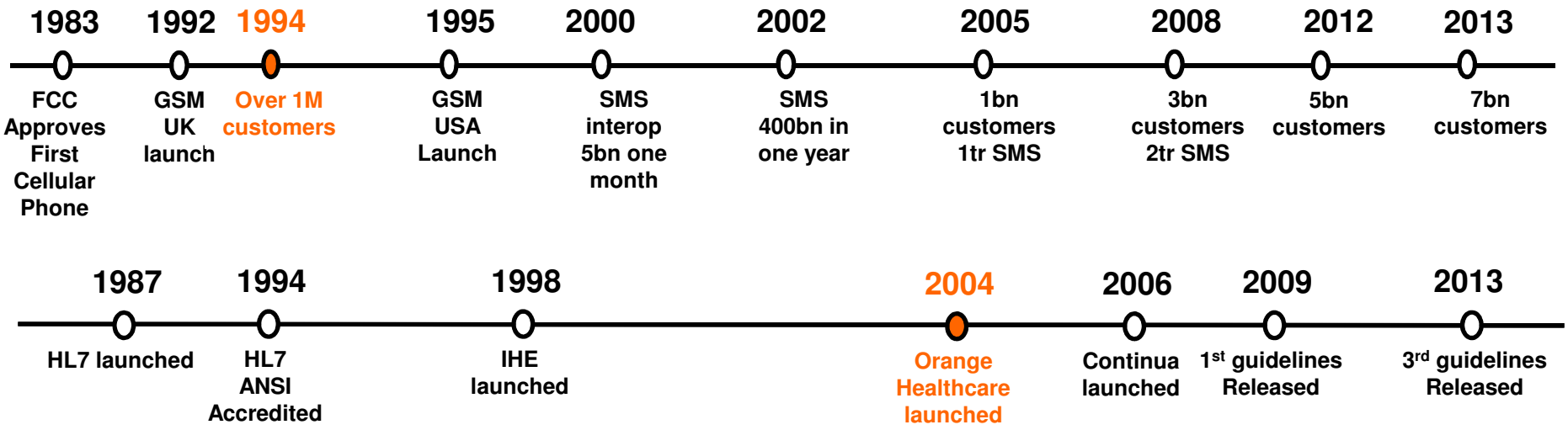
International Alliances

Continua
FONDATION MERIEUX
FONDATION TELECOM
GSMA
Syntec informatique
AFRICA telederm.org
mHealth Alliance
COCIR

Personal Connected Health Alliance
A collaboration between HIMSS, Continua and mHealthSummit

Growth of Health & GSM

7 BILLION



GSM Association founded in same year as HL7 (1987)

3GPP launched in same year as IHE (1998)

Similar start dates – different adoption rates

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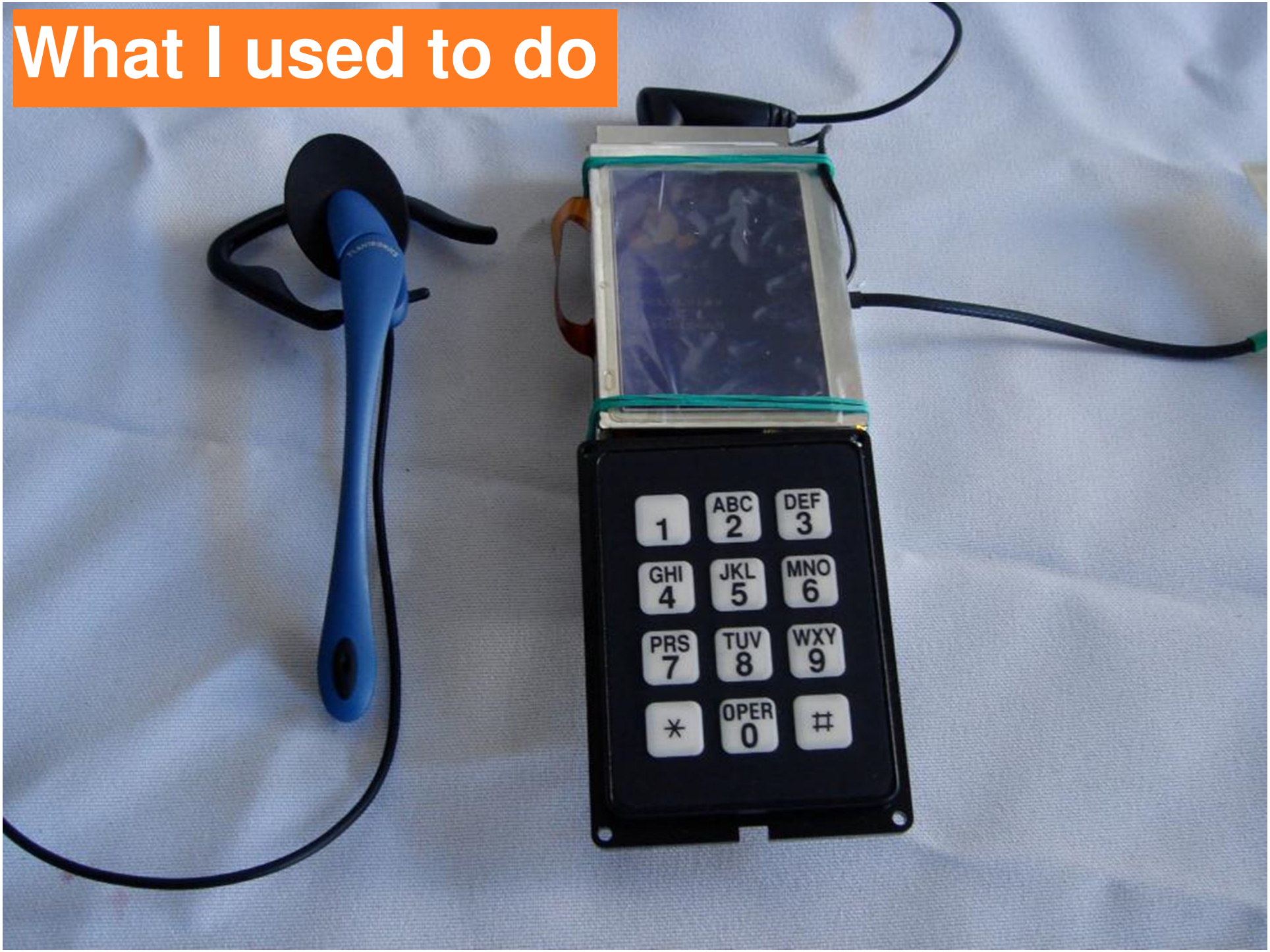
Some Perspective: Early days easily forgotten…

Remember?

1982: A phone for $4,000 for just a few voice calls?

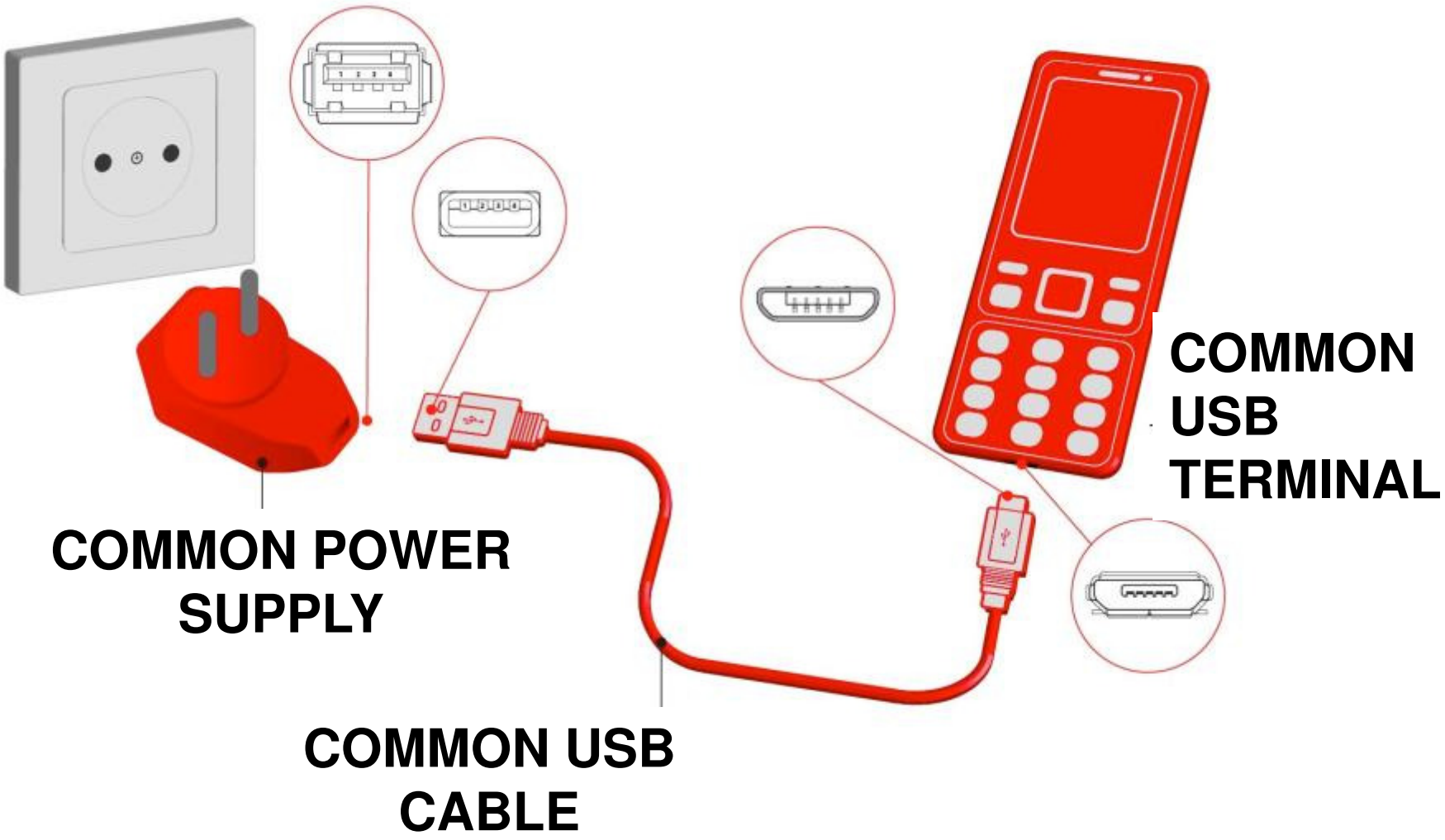
Unable to contact friends on Voda when you were Cellnet

What I used to do



Good ideas can take time

Adopting a common (sense) standard



Standards Landscape

There are (too) many standards to choose from:

Variations on a theme with many interpretations

Everyone agrees on the need for ‘them’

…but the lack of ‘them’ is often cited as a barrier

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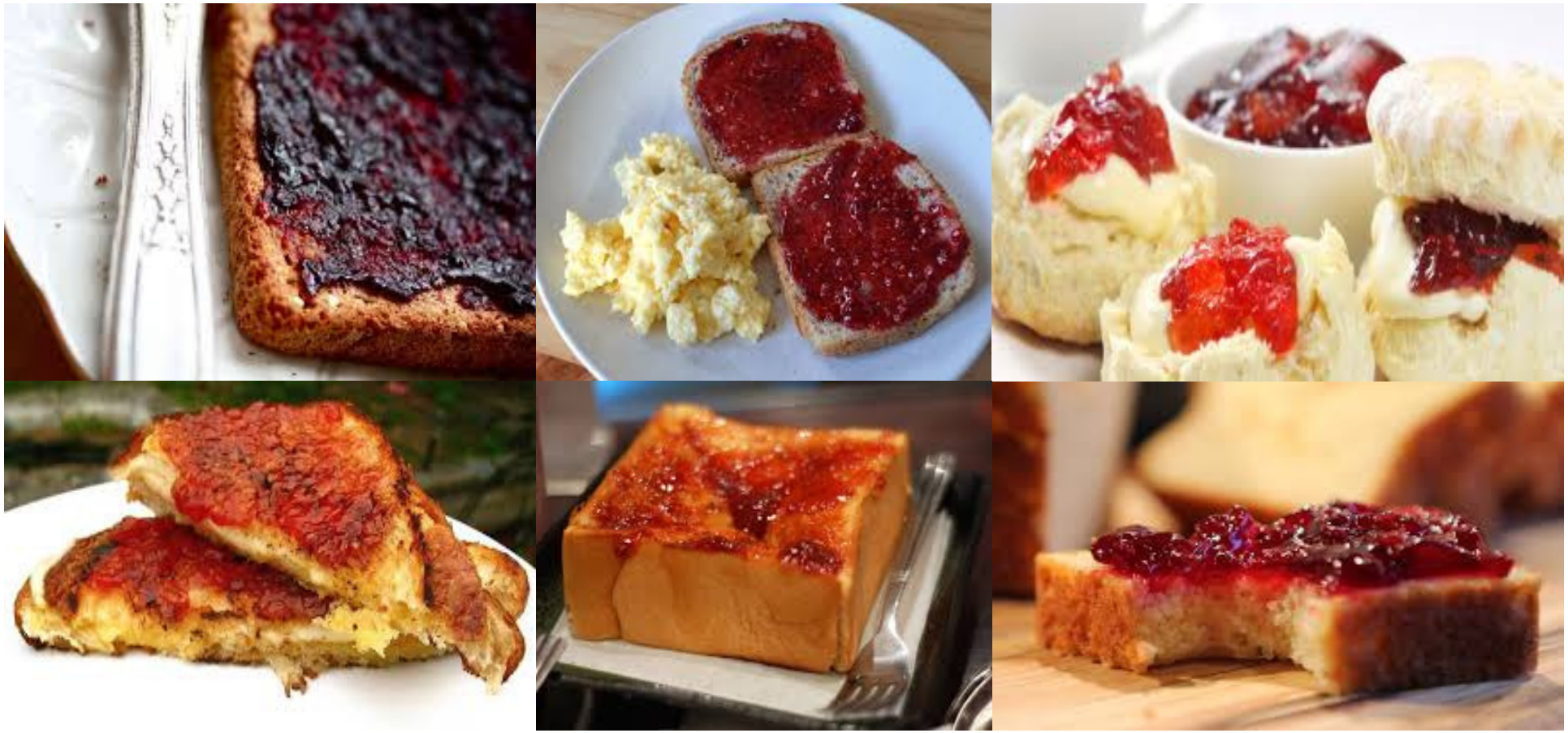
Many ways to implement



Everyone has their personal favourite

Perception

The way in which something is regarded, understood, or interpreted

What people think standards people do

Corporate tourists

In reality meanwhile

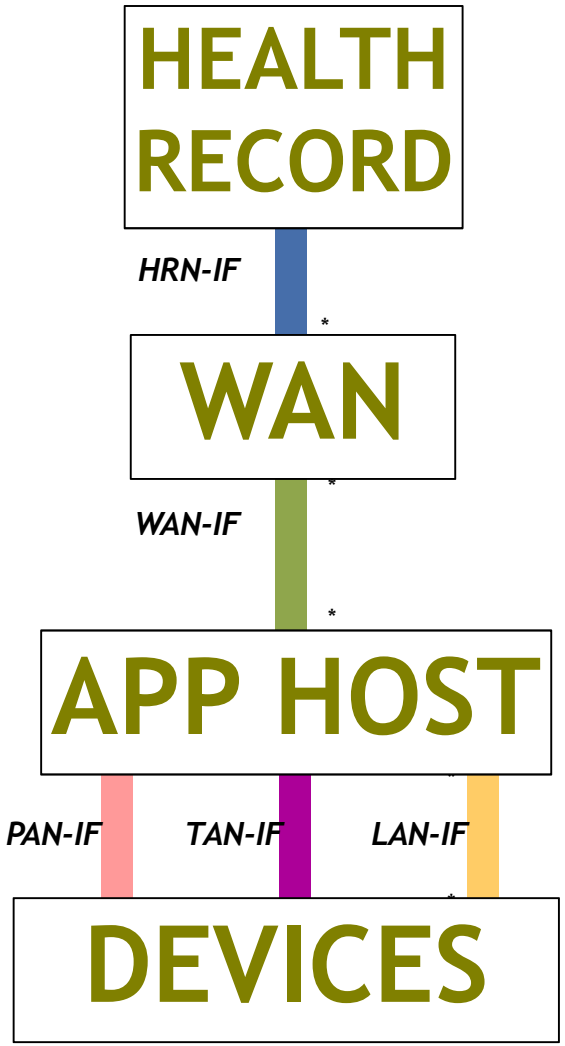
Challenge

a call to prove or justify something

Too much Legacy equipment

Security is Key

Common Interfaces in Continua



TLS v1.0	Confidentiality, Integrity and Authentication
IHE XDM (S/MIME)	Confidentiality, Integrity and Authentication
IHE XUA, IHE XUA++	Entity authentication
IHE PIX	Identity management
IG for HL7 CDA R2 Consent Directive	Consent Management
IHE Document Encryption (DEN) Profile	Consent Enforcement
IHE ATNA	Auditing

WS-I BSP (TLS v1.0)	Confidentiality, Integrity, authentication
WS-I BSP (WS-Security + SAML 2.0)	Entity authentication
IG for HL7 CDA R2 Consent Directive	Consent Management
XML Encryption Specification	Consent Enforcement
IHE ATNA	Auditing
OAuth v2.0	Authorization

Zigbee security	Confidentiality, Integrity and Authentication

Bluetooth security	Confidentiality, Integrity and Authentication

NFC security	Confidentiality, Integrity and Authentication

Guidelines - Certification - Recognizable Logo

Guidelines
strict interoperability

Certification and Logo
recognizable - promise of interoperability with other certified products

SOFTWARE

PACKAGING

APPLICATIONS

SUBSTRATES

Continua
HEALTH ALLIANCE

Certified devices (>90 in total)

A&D Medical

Roche

Texas Instruments

NONIN

OMRON

freescale semiconductor

TOSHIBA

blue giga

TaiDoc

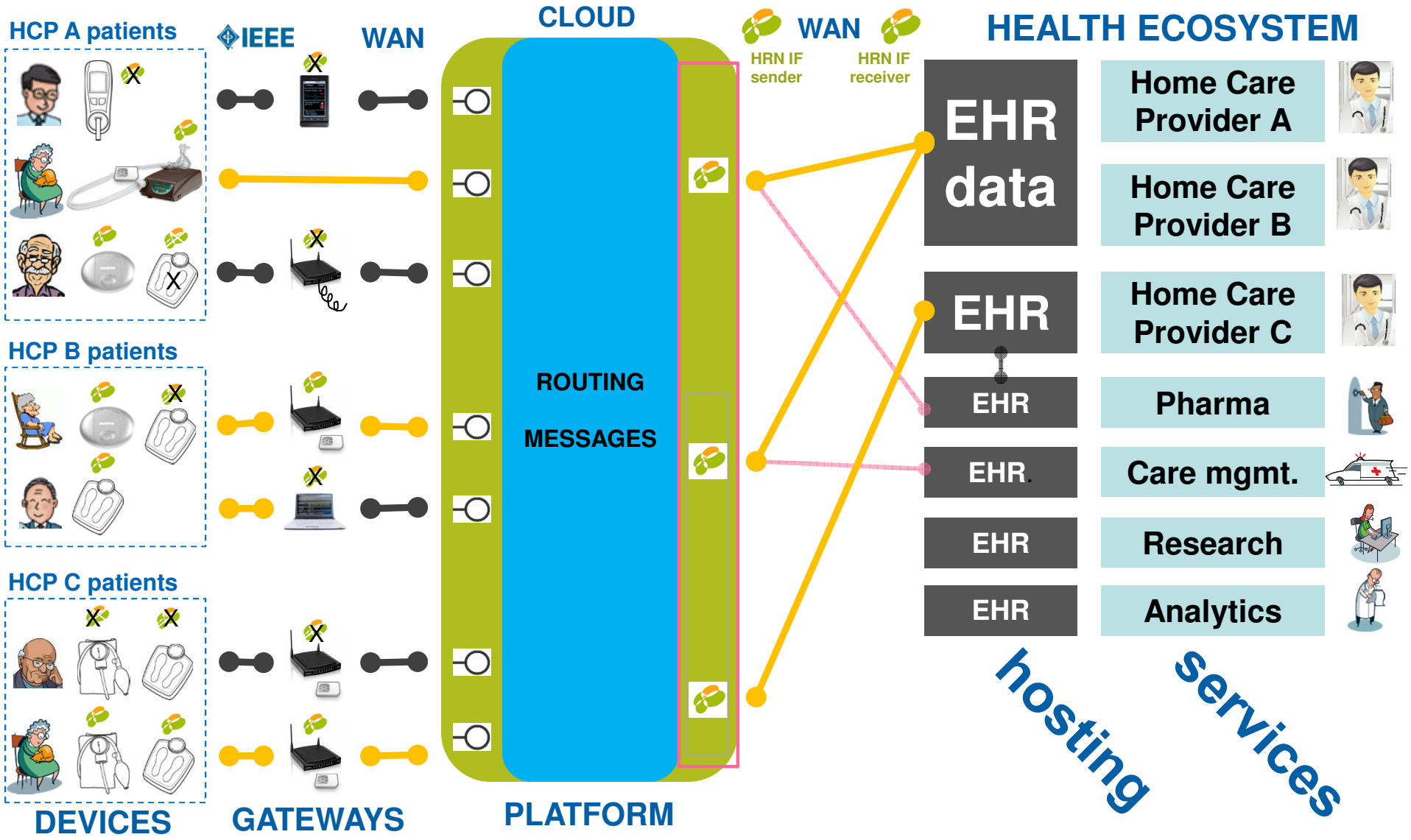
intel

Panasonic
ideas for life

NTT DoCoMo

Breaking Down Interoperability Barriers

INCREMENTALLY



KEEP
CALM
AND
ADOPT
(INTEROPERABLE)
STANDARDS

Thanks
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