eHealth For Urgent Public Health Challenges

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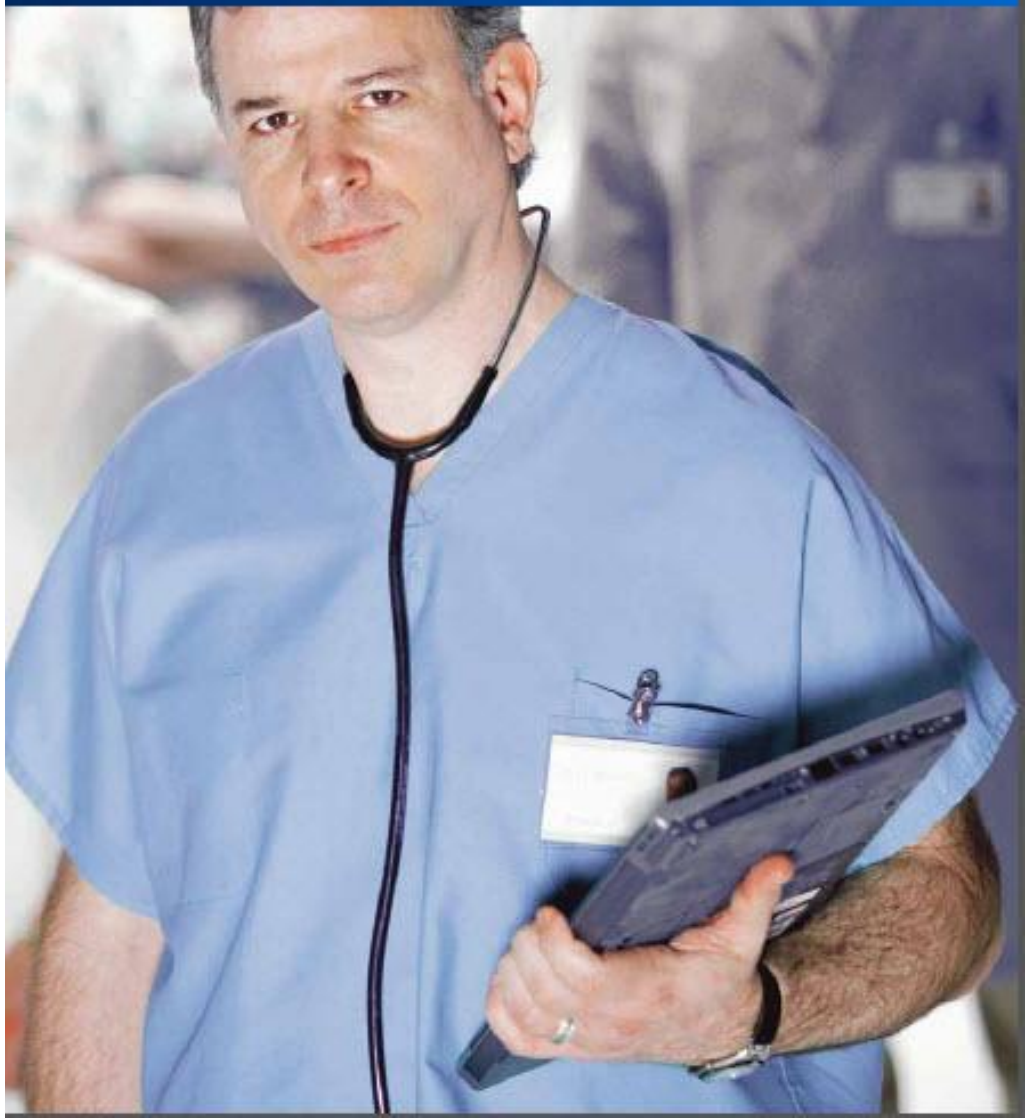
World Health Organization

se2009.eu

eHealth for a Healthier Europe!

– opportunities for a better use of healthcare resources



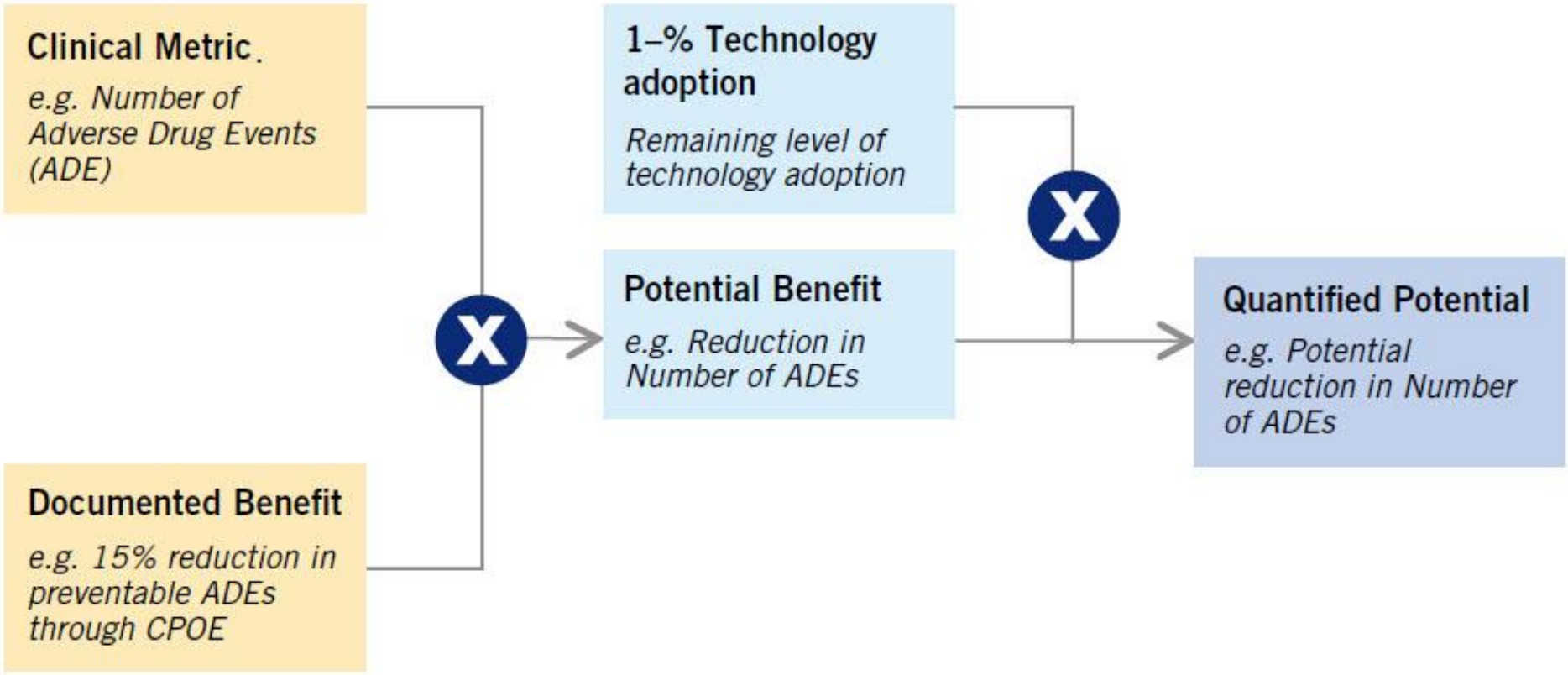


Figure 3. Mechanism for Estimation of Quantified Potential

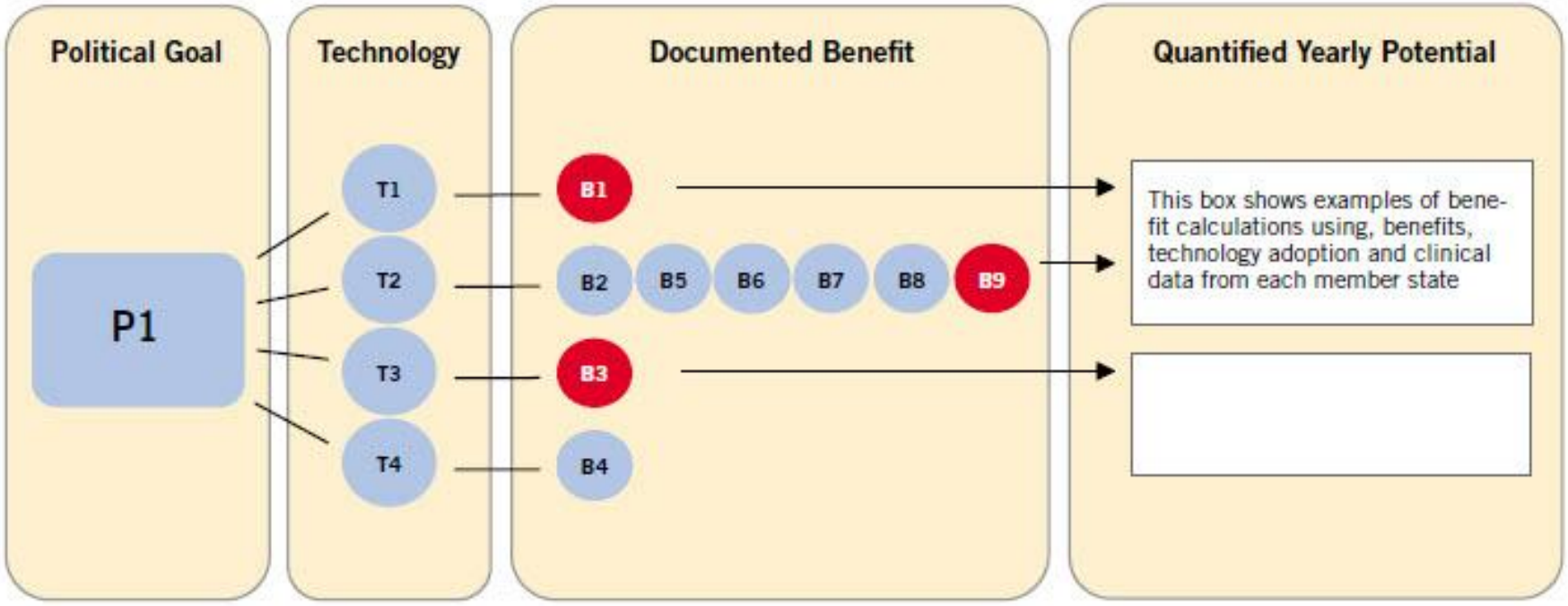


Figure 2. Linking Political Goals, Technologies and Benefits

A quantified potential is calculated based on three factors:

- Clinical Metrics – metrics gathered from six EU member states that indicate the current state of various areas of healthcare in these member states.
- Documented Benefit – Benefits reported in case studies are extrapolated and applied to clinical metrics from the six EU member states to calculate the quantified potential of technology in each member state.
- Level of technology adoption – self-assessed levels of technology adoption are applied to the previous calculation to estimate the potential benefit corresponding to the remaining level of adoption for each technology.

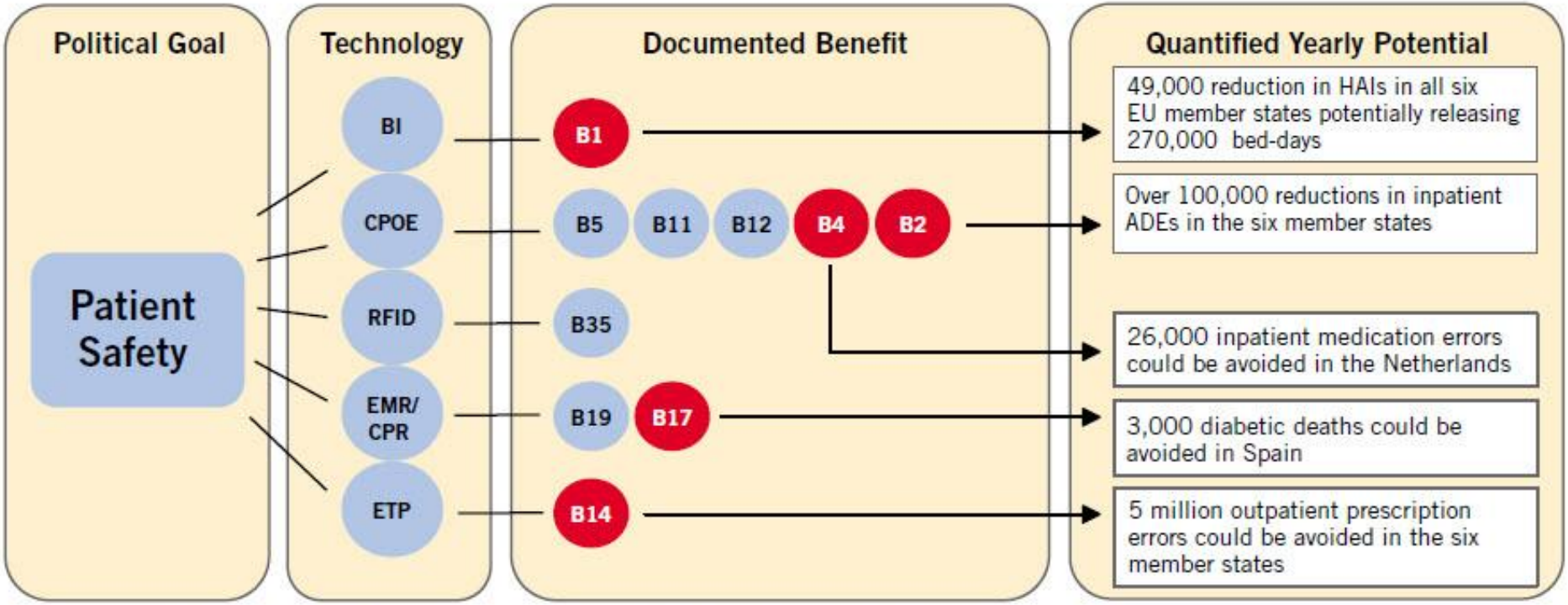


Figure 4. Technologies and Documented Benefits related to Patient Safety

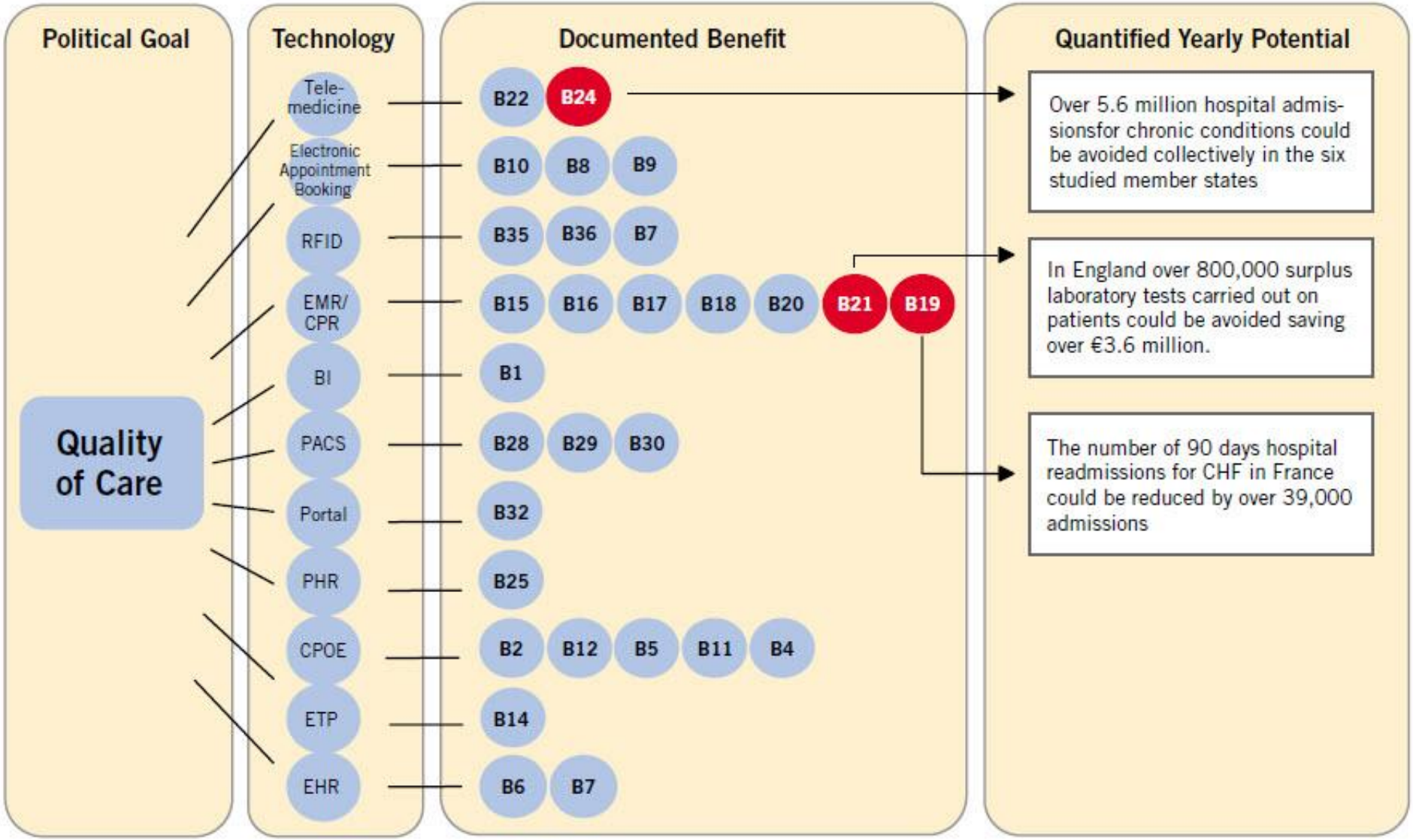


Figure 5. Technologies and Documented Benefits Related to Quality of Care

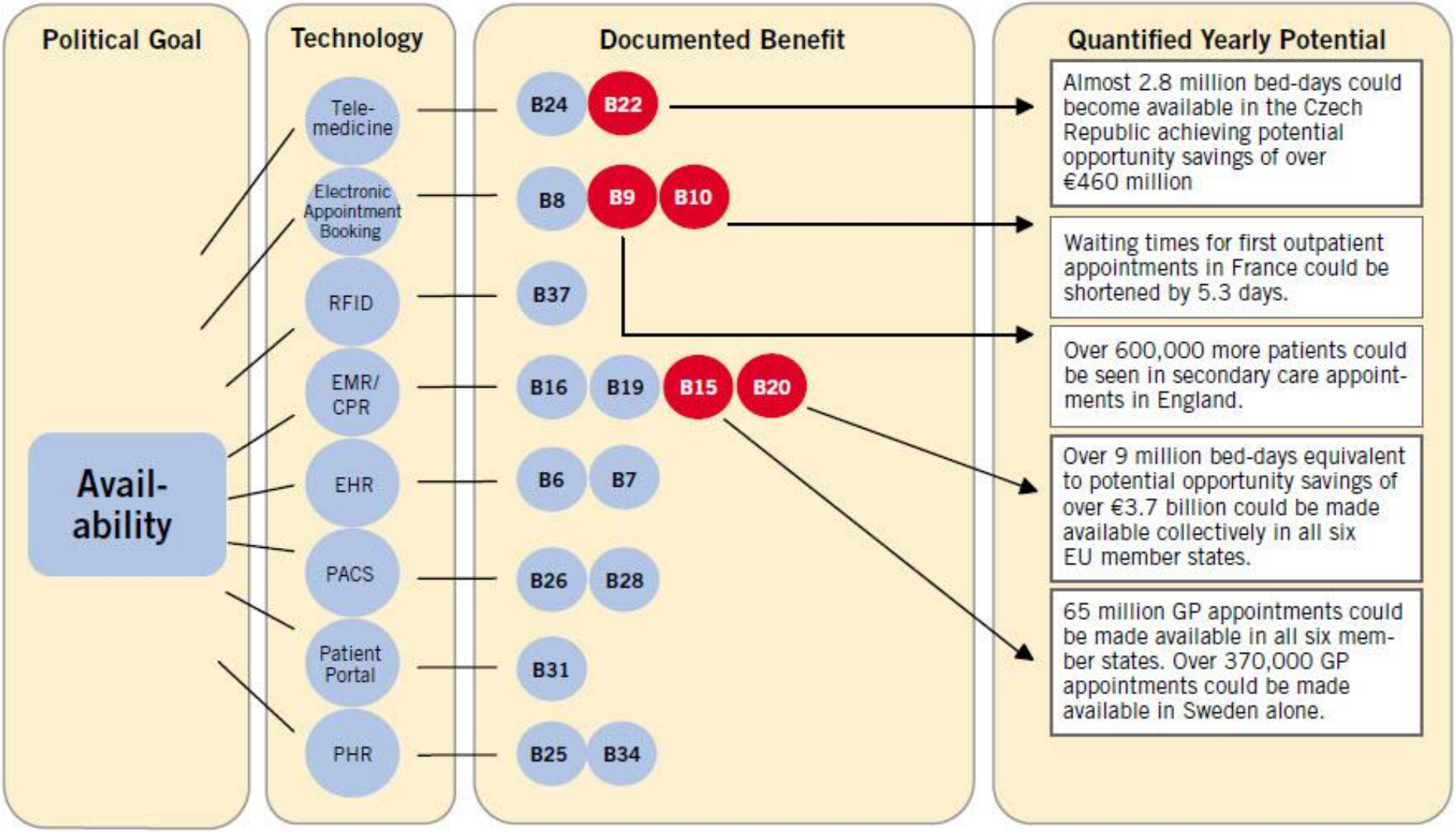


Figure 6. Technologies and Documented Benefits related to Availability

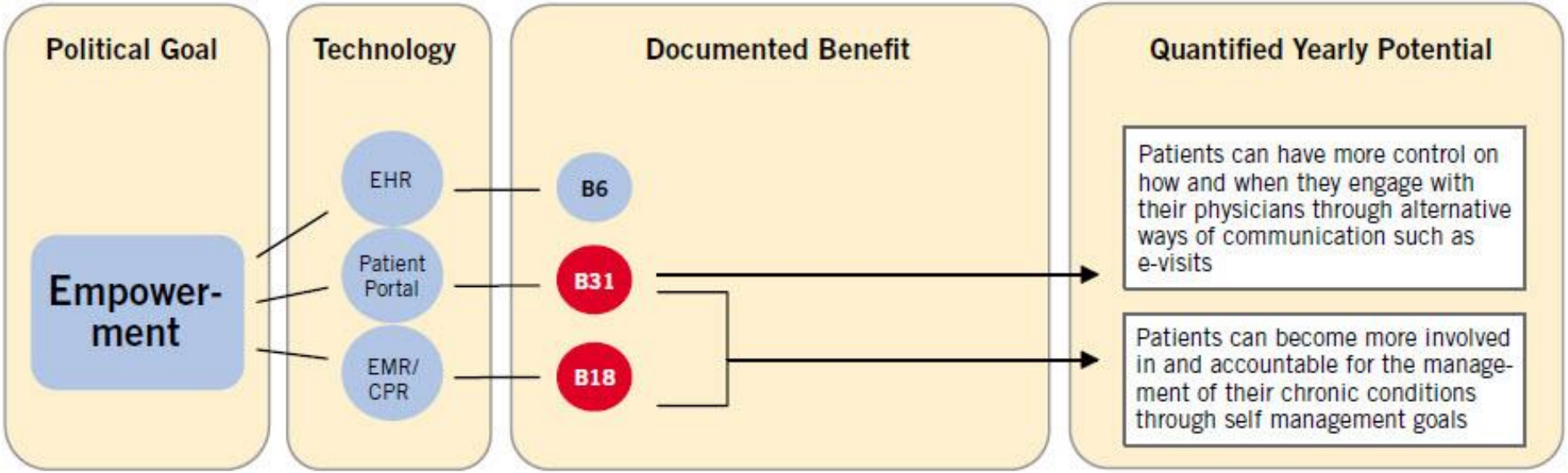


Figure 7. Technologies and Documented Benefits Related to Empowerment

Have You Googled Yourself Today?

Internet use in the U.S. is evolving, as shown by a recent Pew study. Some findings:

- 47 percent of all Internet users have searched for themselves online, up from just 22 percent in 2002.
- Only 3 percent of self-searchers say they search for themselves regularly. 22 percent say they search using their own names "every once in a while." 74 percent say they've checked only once or twice.
- 60 percent say they are not worried about how much information is available about them online.
- When users search their names, 60 percent find some relevant results and 38 percent don't.
- 87 percent of self-searchers who locate information about themselves say most of it is accurate, up from 74 percent who said this five years ago. 11 percent say most of the information is not accurate (down from 19 percent five years ago), and 4 percent say there's information online that's embarrassing or inaccurate.
- When it comes to Googling others, most users say they search for someone from their past (36 percent) as opposed to a job candidate (11 percent) or someone they are dating (9 percent).

Source: Pew Internet & American Life Project, 2008

Illustration by Alex Eben Meyer

The use of Internet to find health care related in formations

Health On the Net

- 26,000 health related websites available
- 33m US citizens used the net for health advice in 1998
- 27% of female users & 15% of males look at medical information a least once per week (Source BMJ 13/11/99)

Primary Hits (August 1999)

1. drkoop.com (No. 76) - 3,474,000
2. aol health.aol (No. 229) - 1,508.000
3. onhealth.com (No. 246) - 1,432,000
4. webmd.com (No. 324) - 1,207,000
5. discoveryhealth.com (No. 405) - 1,036,000
6. betterhealth.com (No. 533) - 819,000
7. thriveonline.com (No. 539) - 813,000
8. Mayohealth.org (No. 583) - 766,000
9. Healthyideas.com (No. 637) - 709,000
10. Intelihealth.com (No. 898) - 514,000

Every month, there are over **25 million** website visits to nearly 500 online health and wellbeing sites by UK citizens, with NHS Choices accounting for over half of all traffic and WebMD handling nearly two million visits[8]

NHS - Digital First-The delivery choice for England's population, 2012

The New Model

Involve patient and family

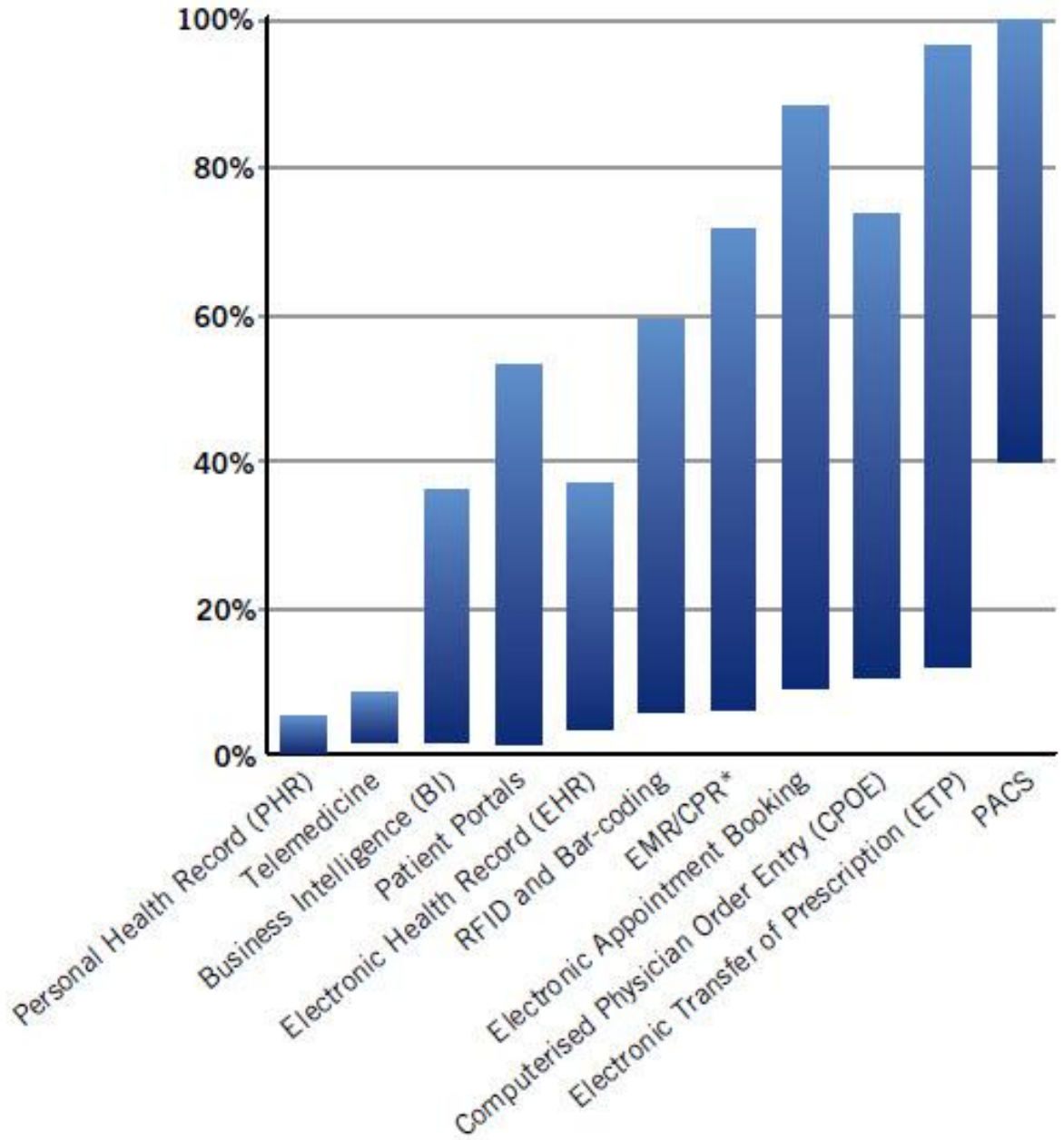


Figure 10. eHealth Self Estimated Level of Adoption among the Six Member States

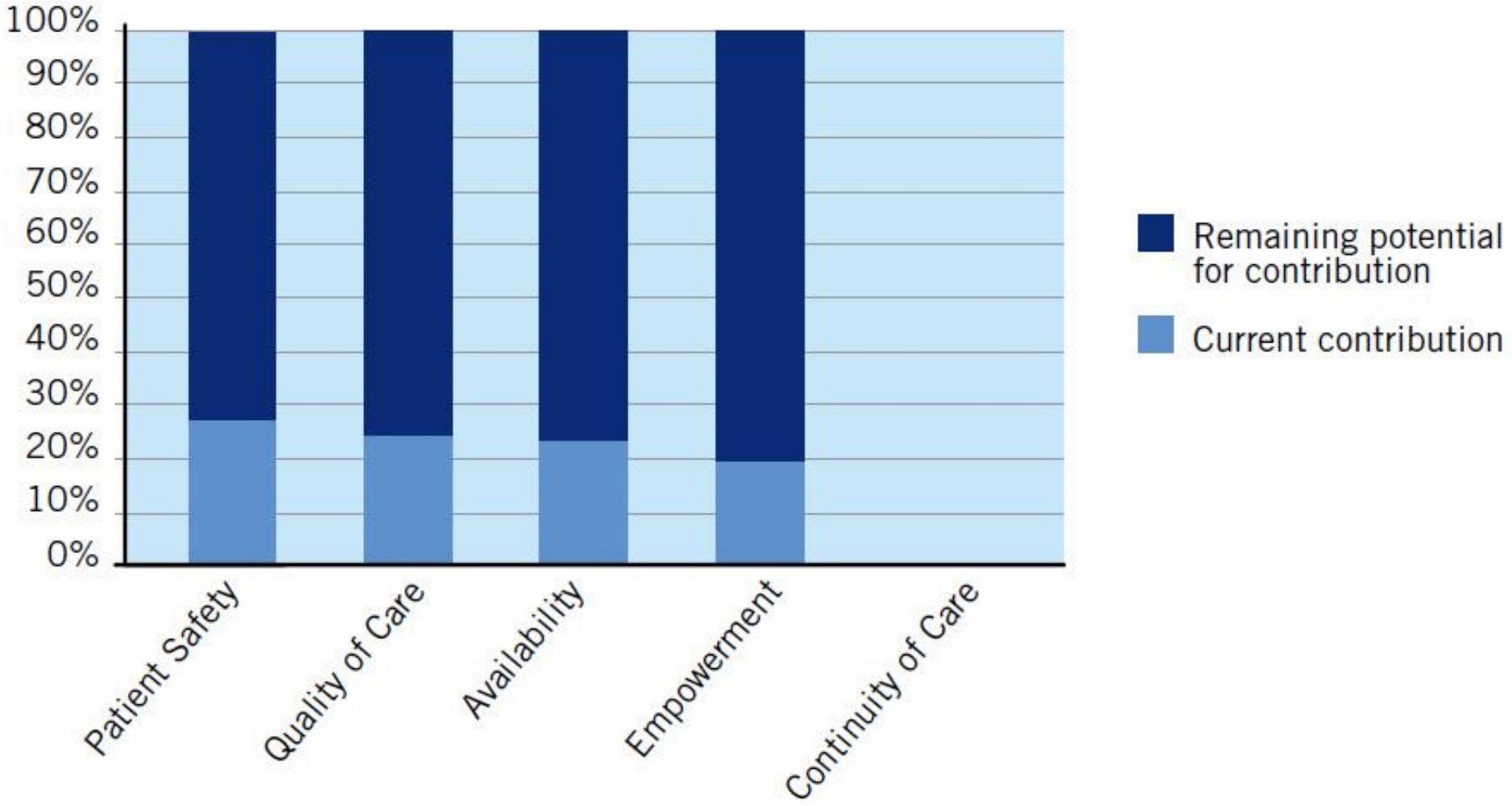
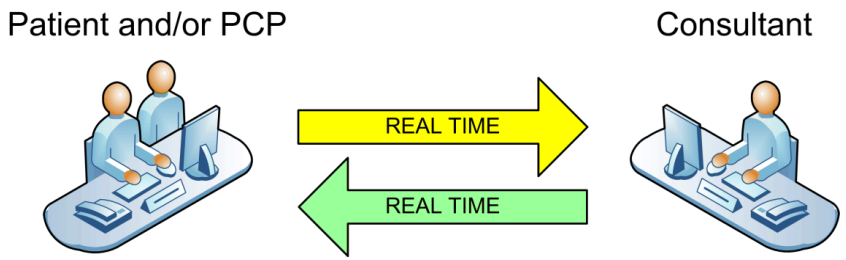


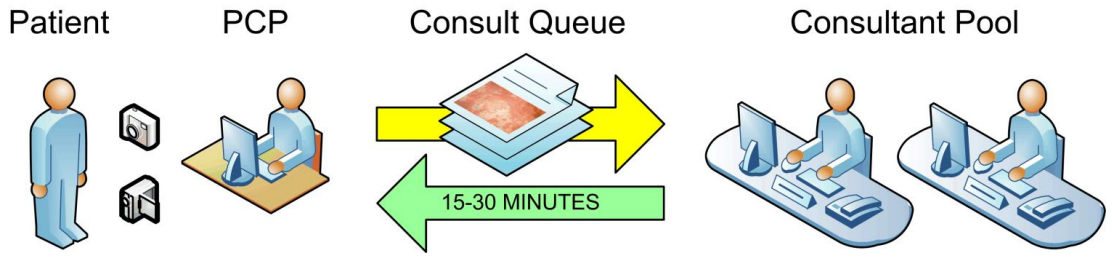
Figure 8. Remaining Potential Contribution of eHealth to Political Goals

Technologies	Political Goals				
	P1 Patient Safety	P2 Quality of Care	P3 Availability	P4 Empowerment	P5 Continuity of Care
T1 Electronic Medical Records (EMR) / Computer-Based Patient Records (CPR)	•	•	•	•	
T2 Electronic Health Record (EHR)		•	•	•	
T3 Electronic Appointment Booking		•	•		
T4 Computerised Physician Order Entry (CPOE)	•	•	•		
T5 Electronic Transfer of Prescription (ETP)	•	•			
T6 Picture Archiving and Communications System (PACS)		•	•		
T7 Personal Health Record (PHR)		•	•		
T8 Patient Portals		•	•	•	
T9 Telemedicine		•	•		
T10 Business Intelligence (BI) – *for real time detection of hospital infection patterns*	•	•			
T11 Radio Frequency Identification (RFID) and Barcoding	•	•	•		

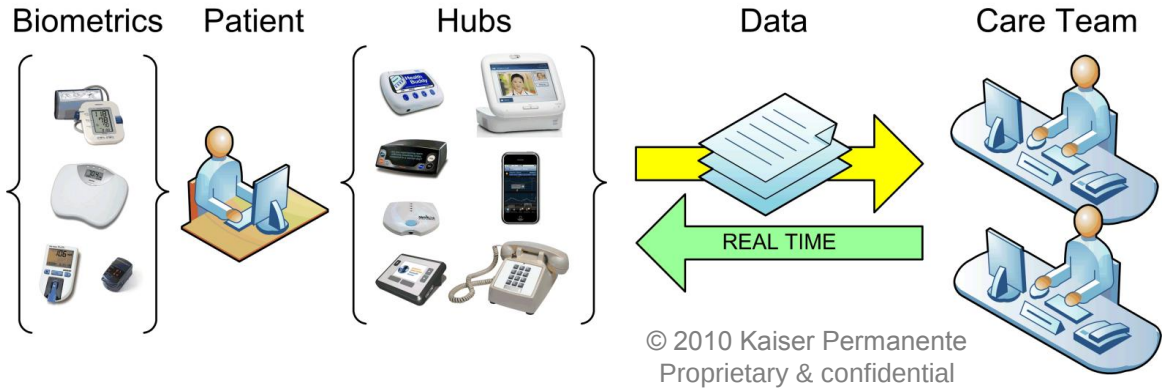
Three Models



Real-time Teleconsultation

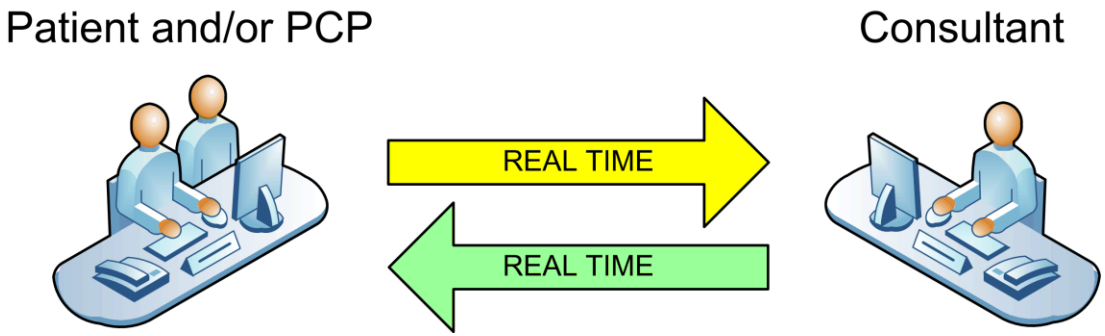


Store-and-forward Teleconsultation



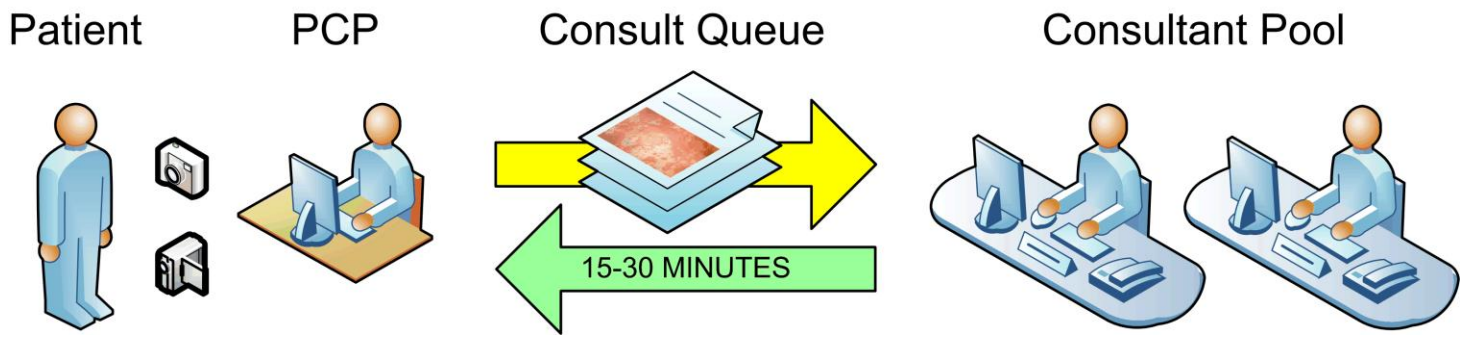
Telemonitoring (Remote Patient Monitoring)

Real-Time Teleconsultation



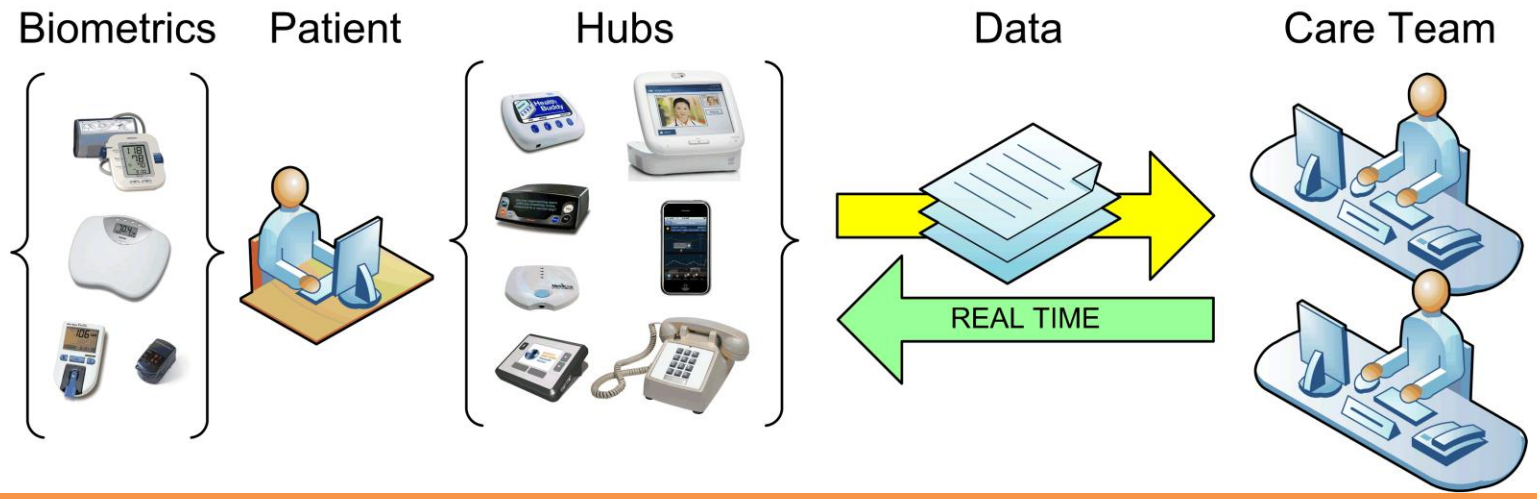
Modality	Pros	Cons	Comments
Real-time Teleconsultation	Immediacy 'In person' Trust Consultant able to drive session Teaching moment	Must schedule all parties at once Not more efficient Supply ≠ demand Scope expansion Regulatory implications	Addresses inequitable distribution, *not* scarcity Avoids travel

Store-and-Forward Teleconsultation

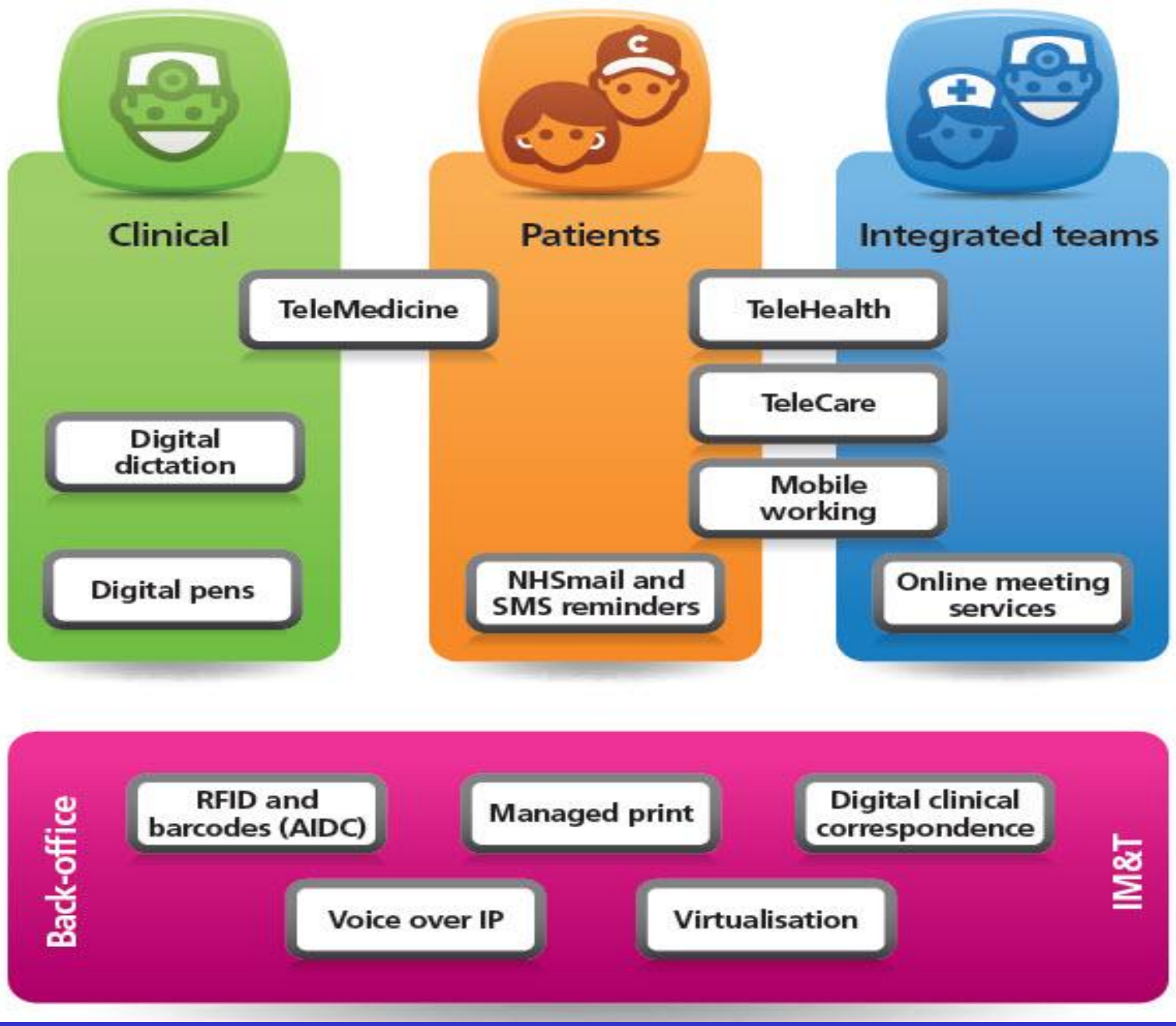


Modality	Pros	Cons	Comments
Store-and-forward Teleconsultation	More efficient Defined scope Supply = demand All parties work independently	Time lag to diagnosis Limited patient interaction Potential distrust	Addresses inequitable distribution *and* scarcity Avoids travel

Remote Patient Monitoring



Modality	Pros	Cons	Comments
Telemonitoring	Better access 'Personalization' Early detection Fewer visits and hospitalizations Members love it	Data issues Integration issues Rules engine issues	Multimodal by population Team-based care Requires initial in-person visit



http://www.networks.nhs.uk/nhs-networks/qipp-digital-technology-and-vision/documents/QIPP_DT_Technology_Essentials_Guide.pdf

AMBIENT ASSISTED LIVING

JOINT PROGRAMME

AAL
AMBIENT ASSISTED LIVING

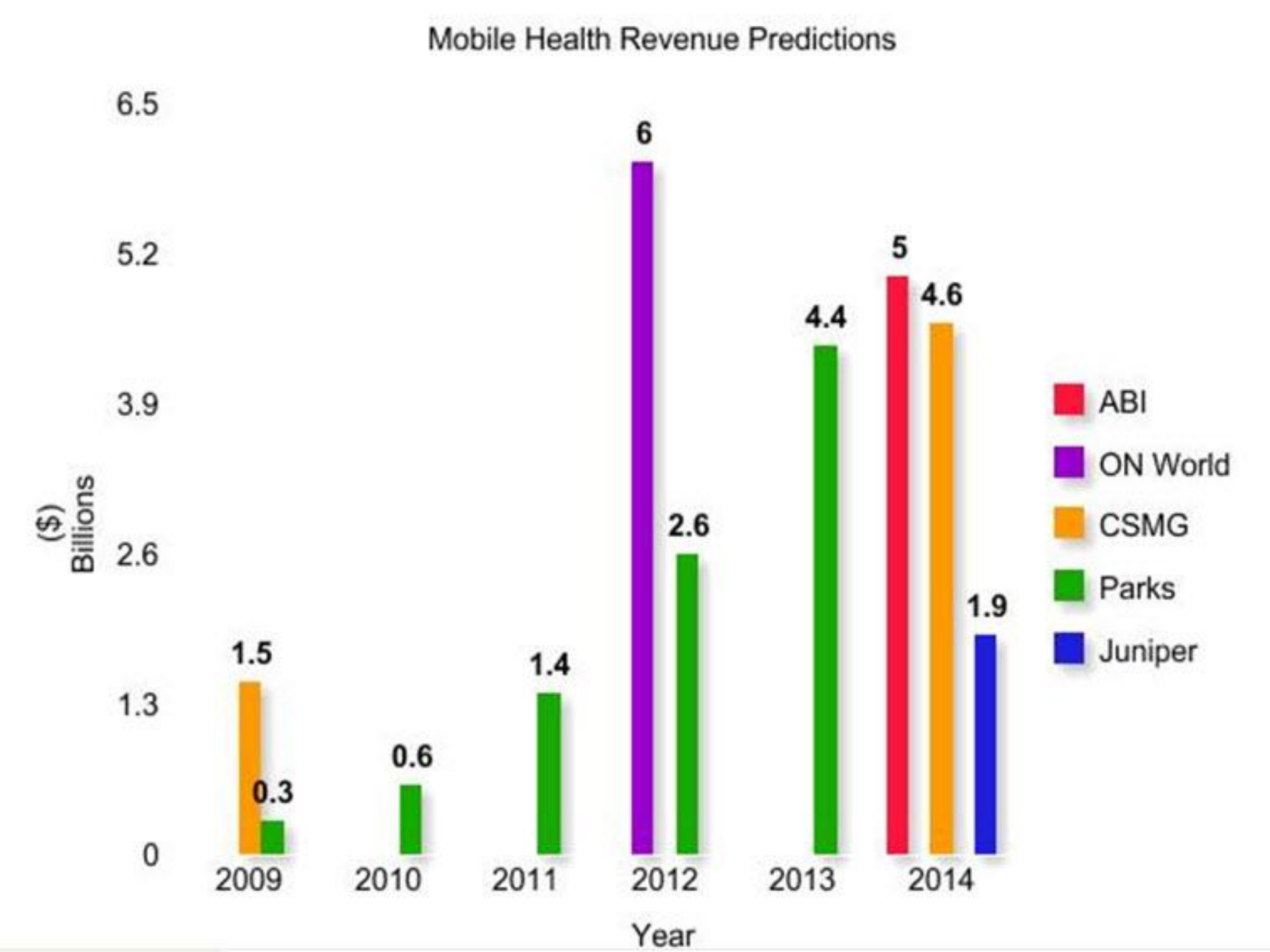
ICT for ageing well

Catalogue of Projects 2012

Ambient Assisted Living

The AALJP is a funding activity that started in 2008, with 23 countries working together to develop a joint programme of activity to improve the quality of life for older adults through the application of Information and Communication Technology (ICT). The programme co-funds projects between at least three partners from our partner states (Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland and the United Kingdom).

What is included in Bodycheck kit?


Mobile Health Revenue Predictions
6.5
5.2
3.9
2.6
1.3
0
($) Billions
1.5
0.3
0.6
1.4
6
2.6
4.4
5
4.6
1.9
2009
2010
2011
2012
2013
2014
Year
ABI
ON World
CSMG
Parks
Juniper

Potential of the m-Health Market

- **9.8 bln USD in 2010**
- **23.0 bln USD in 2015**
- **500 mln smartphones will use apps for mobile healthcare**

Pricing Model – you sell tests

- Sales price of the test € 195,-

Payment to Bodycheck for analysis of test results and medical validation:

€ 50,-

Your net income per test:

€ 145,-

Pricing Model – we give you tests

Bodycheckpoint receives € 50,- for each test performed on customers that are referred to Bodycheckpoint by Bodycheck

Bodycheck has contracts with companies, insurers, sport associations to perform tests. Bodycheck sends the people for tests to Bodycheckpoints.

REMARK: performing a full test takes roughly 20-30 minutes

Business model

• 30 leads offered to you:	30x € 50,-	€ 1.500,-
• 10 leads by you:	10x € 161,-	€ 1.610,-
• Total:		€ 3.110,-
• Leasing price Bodycheck kit:		€ 480,-
• Payment for medical assessment:		€ 500,-
• Profit per month:		€ 2.130,-

FIAT 500 with Bodycheck Logo's