<u>ANTILOPE:</u> Adoption and take up of standards and profiles for eHealth interoperability

<u>Shared Care Platform:</u> Functionality to establish cross sector collaboration and continuity of care

Morten Bruun-Rasmussen mbr@mediq.dk



Adoption and take up of standards and profiles for eHealth

- The Antilope Thematic Network will make recommendation in term of viability, sustainability and scalability in three areas:
 - eHealth European Interoperability
 Framework (eEIF)
 - 2. Testing Quality Processes and Tools
 - European-level Testing and certificationGovernance
- http://www.antilope-project.eu/







Antilope. Work Packages



Management Project

WP6:

WP1: eHealth Interoperability Framework



WP2: Quality Manual for IOP Testing

WP3: Testing Tools

WP4: Labelling and Certification Process



WP5: Validation, Scalability to EIP and Adoption







WP2: Objective



To produce a Quality Manual for Interoperability Testing.

The Quality Manual will consist of a Quality Management System (QMS) and a description of Interoperability Testing Processes (IT-P).

The Quality Manual will be a valuable tool for the continuous improvement of Interoperability Testing in the eHealth Domain.







WP2: Deliverables





Quality Manual for Interoperability Testing - PART I:

D2.1: Quality Management System for Interoperability Testing



Quality Manual for Interoperability Testing - PART II:

D2.2: Interoperability Testing Processes



D2.3: Educational material







Interoperability (one definition)



The ability of two or more systems or components

to exchange information

and to use the information that has been exchanged

Source: Institute of Electrical and Electronics Engineers.

IEEE Standard Computer Dictionary: A Compilation of IEEE Standard Computer Glossaries.

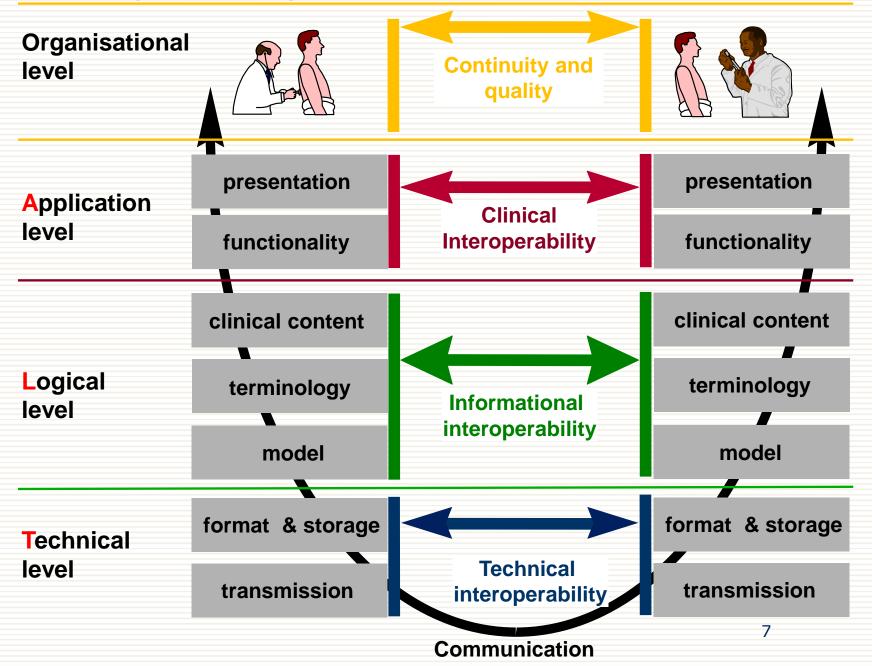
New York, NY: 1990.







Interoperability and the ALT-model



Quality Management System (one definition)

A Quality Management System is a set of interrelated or interacting elements

that organisations use to direct and control

how quality policies are implemented and quality objectives are achieved.

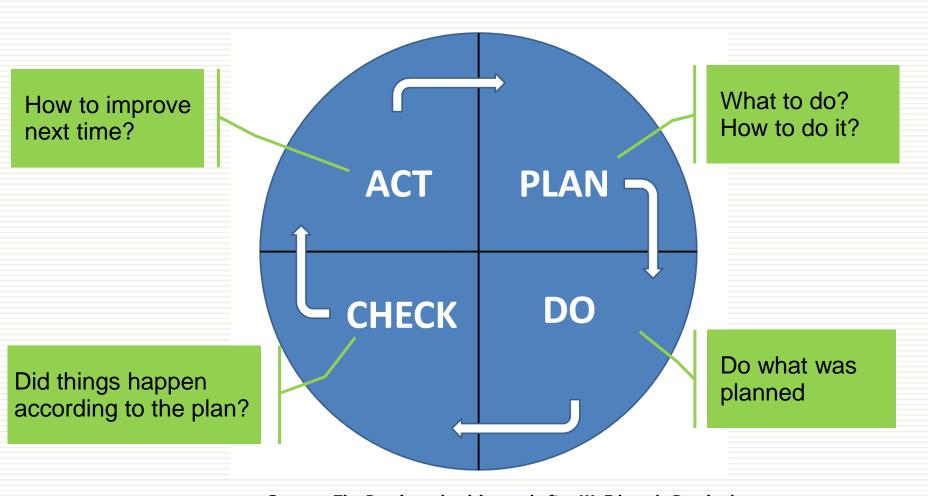
Source: ISO 9000: Quality Management Systems







Quality Management System and the PDCA cycle



Source: The Deming wheel (named after W. Edwards Deming).

A model for continuous improvement.



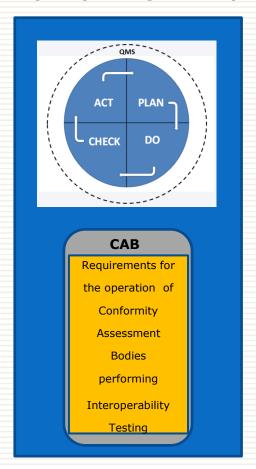




Quality Manual for Interoperability Testing

Part I
D2.1 Quality Management System

Part II
D2.2 Interoperability Testing Processes











<u>Shared Care Platform:</u>Functionality to establish cross sector collaboration and continuity of care

Project owner: South Denmark Region

Population: 1.2 mill. inhabitants

Project status: Pilot test

Daily operation

Exploitation





Health Care Providors – 3 sectors







Primary Care

Responsible for:

General
health problems
including
prevention and
chronic diseases

Hospitals

Responsible for:

Specialised treatment and intensive care

Municipalities

Responsible for:

Prevention, rehabilitation and social care





Chronic diseases



- Extent (estimate for Denmark)
 - 1,7 mill. lives with one or more chronic diseases
 - 0,5 mill. with intense reduced functionality
 - Public expenditures are 20 billion EUR per. year
 - 80% of the health care cost
- Special attention to
 - Diabetes (220.000)
 - Cancer
 - Cardio vascular diseases (320.000)
 - Osteoporosis
 - Asthma
 - COPD (430.000)
 - Psychological diseases
- Enhanced effort
 - Regions and municipalities
 - Extra funding from the Ministry of Health 2010-2012
 - 80 mill. EUR (2010-2012)





eHealth landscape in Denmark



- 100% of the Pharmacies have it-systems
- 100% of the Hospitals have PAS
- 80-90% of the Hospitals have EHR
- □ 99,9% of the GP's have EHR
- □ 99,9% of the Municipalities have Care systems
- □ Effective Health Care Network (MedCom) 5,5 mill. Messages pr. Month
- □ National eHealth Repositories, Clinical Databases, ...
- □ National Service Platform (Medication, Patient Summary, ..)
- □ Public Health Portal (www.sundhed.dk)
- ... and much more

A good starting point

But – many of the solutions are fragmented and does not use common national/international standards.





eHealth landscape in Denmark



- □ 100% of the Pharmacies have it-systems
- 100% of the Hospitals have PAS
- 80-90% of the Hospitals have EHR
- □ 99,9% of the GP's have EHR
- □ 99,9% of the Municipalities have Care systems
- □ Effective Health Care Network (MedCom) 5,5 mill. Messages pr. Month
- □ National eHealth Repositories, Clinical Databases, ...
- □ National Service Platform (Medication, Patient Summary, ..)
- □ Public Health Portal (www.sundhed.dk)
- ... and much more

A good starting point

But – many of the solutions are fragmented and does not use common national/international standards.





System concept



Users	Functionality			Diseases		Integration	
Hospital	Master data and relatives	User administrati on	Decision support	Heart	Pregnancy	NemID (secure access)	CPR (patient identifier)
Municipality	Analysis and reports	The patients own data	The patients plan	COPD	The elderly medical patient	Health Organisation Index	Laboratory portal
General practitioner	Home monitoring	Configuring	Activities and calendar	Diabetes	Brain damaged Children/ youngs	Data Capture from GP systems	Context call to other eHealth systems
Patients	Questionnai res	Forms (Data entry)		Cancer rehabilitatio n	Psychiatry	National Medication database	EHR in Hospitals and Social Care
Relatives	eConsultation (Video)					Home monitoring	







Morten Bruun-Rasmussen mbr@mediq.dk