Certification and testing
Denmark
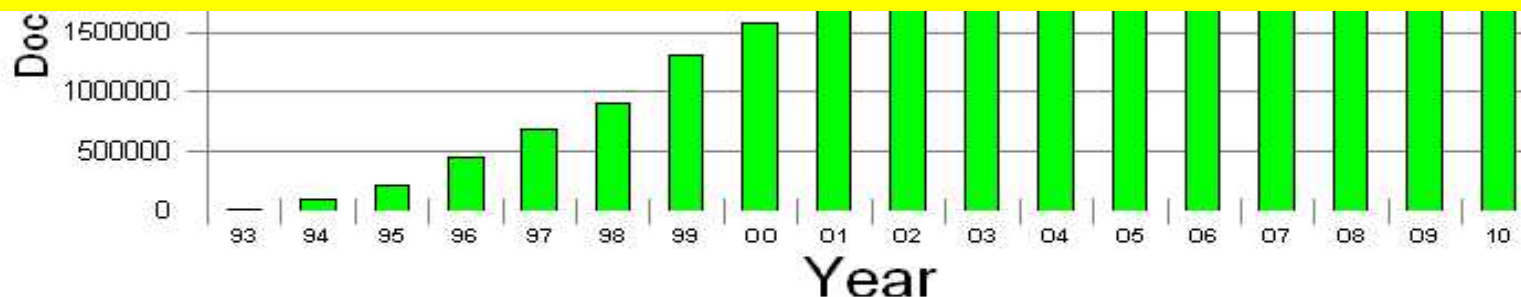
- **Information exchanged using national standards**

- **Many vendors, interoperability a must**

- **Testing**
  - **Syntax / technical**
  - **Semantic**
  - **Clinical**

- **Test protocols**

- **Test examples**

- **Test tools**

- **Publication**

- **Labelling**

- **Results**

- **Onsite / test camps**

Information exchanged - profiles

MedCom -The Danish Health Data Network
Messages/Month

More than 100 profiles =

Standards with content defined by clinicians

Total number of documents / month

Year

Messages and webservices

- **EDIFACT / HL7**
- **XML**
- **Webservices**
- **Dynamic forms**
  - **Documented in "Good EDI/XML Letters"**
    - Background for non health persons
    - Recommendations from clinicians
    - Technical part
      - **Mandatory, Optional, Dependant**
      - **Content, rules**
      - **Standard**
      - **Valid qualifiers and codes**
      - **Test examples**

Software and systems

- **More than 60 different, covering some or many profiles**

- **More than 100 standards/profiles**

- **Interoperability is a MUST**

  - **Syntax**

  - **Semantic**

  - **Clinical**

- **Secured through MedCom testing and approval**

Testing proces

- **Technical interoperability –**
  - Syntax check in testserver / on-line testtools
- **Semantic interoperability**
  - testprotocol – screen dump / correct and full content
- **Clinical interoperability**
  - testprotocol, on site, live test, unknown examples
- **Publication – You are "approved"**

Testing proces

- **Technical interoperability –**
  - Syntax check in testserver / testtools
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- **Publication – You are !approved!**

Konverter en edifact til et XML dokument

Menu

Konverter EDI til XML

Konverter XML til EDI

Validér EDI

Validér XML

EDI-eksempler

XML-eksempler

Download Schema'er

Kontakt MedCom

Vælg en edifact!

[   ] [Gennemse...] [Konverter]

Herunder ser du et billede af konverteringsprocessen. Du har, ved at klikke med musen i billedet, mulighed for at vælge at:

- se XSLT-filerne der bruges til konverteringen
- se schema filerne der bruges til valideringen
- nøjes med at konvertere til XML 1-1 formatet
- konvertere til XML uden schema validering
- konvertere helt til et valideret XML dokument

Testing proces

Testing proces

Testing proces

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Testing proces

Testprotokol for håndtering af MedComs standard REQ01, version Q0131K. Fra hotel med sekundær rekvirent

			Opgave	Forventet resultat
test 22 -1 modtagelse af rekv fra sekundær rekvirent , svar til primærrekv, rekv samt kopisvar				
		Modtag rekv 22-1		
			vis primærrekvirent	Vis rekvirenten som promærrekvirent incl adresse.. Skal have svar tilbage
			vis rekvirent	Vis rekvironten den der tager prøverne . Skal have svar tilbage
			vis person i org	Initialerne skal med - sendes videre i svaret.
			Vis prøvetagers labnr	Vis korrekt rekv nr
			Vis prøvetagers glasnr	Vis evt glasnumre fra prøvetager
			Vis betaler	Vis betaler information
			Vis kopisvarmodtager	Kopisvar til en kodet kopisvarmodtager
			vis evt kodede promptopm/svar	vis hvis med. Incl koden.
test 22-2 - modtagelse af rekv fra sekundær rekvirent , men ikke svar til prøvetager				
		Modtag rekv nr22-2 intet svar til prøvetager(rekvirent)		
			vis primærrekvirent	Vis rekvirenten som promærrekvirent incl adresse Skal have svar tilbage .
			vis rekvirent	Vis rekvirenten - den der tager prøverne . Skal IKKE have svar tilbage

Testing proces

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Testing proces

Status 09 February 2011		Laboratorysystems approved by MedCom										
		Labka	Labka II	BCC lab	Netlab 2	ADBakt	MADS	Misys	Safir LIS	Prosang	Blodflocct	BCC b od
Labproject 1, WebReq		MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved			MedCom Godkendt/ Approved
Labproject 2, Interlab order- Triangel	Receive	old vers on	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved				MedCom Godkendt/ Approved	MedCom Godkendt/ Approved			
	Send	old vers on	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	old version						?	?
Labproject 3, Requisition Hotel, "Webservi	Upload	EDI	MedCom Godkendt/ Approved	EDI								
	Download	EDI	MedCom Godkendt/ Approved									
Labproject 4, Interlab results	Send	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved				MedCom Godkendt/ Approved	MedCom Godkendt/ Approved			
	Receive	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved		?			?	?	?	?
Labproject 5, Producer, Producercode	Send	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved		MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved		MedCom Godkendt/ Approved	MedCom Godkendt/ Approved
Labproject 6, National shortname			MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved			MedCom Godkendt/ Approved			MedCom Godkendt/ Approved	
Labproject 7, URL Interpretation												
Labproject 8, National sample ID				MedCom Godkendt/ Approved		MedCom Godkendt/ Approved						
Labproject 9, Webquality		?	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved	MedCom Godkendt/ Approved							
Labproject 10, Results national labportal	XRPT01			MedCom Godkendt/ Approved						?	?	?
	KFII		?	MedCom Godkendt/ Approved								
Labproject 11, Sample receiving	Automatic	?		MedCom Godkendt/ Approved	MedCom Godkendt/ Approved							

Not relevant

MedCom Godkendt/ Approved — Approved

Approved old standard

Not approved

testing

? No info

Testing proces
RESULTS

- **Interoperability a MUST**

- **Real interoperability a reality= it works**

- **Accepted by**
  - **SW vendors,**
  - **Clinicians,**
  - **Customers**

- **Vendors very satisfied with testing process**

- **MedCom certified "A MUST" in tenders**

- **Webservice testing is difficult.**

Lesson learned

- **Important with structure in testing**

- **More strict test plans, QA manual**

- **Implemented in all profiles/standards**

- **Important to have test tools for all profiles**