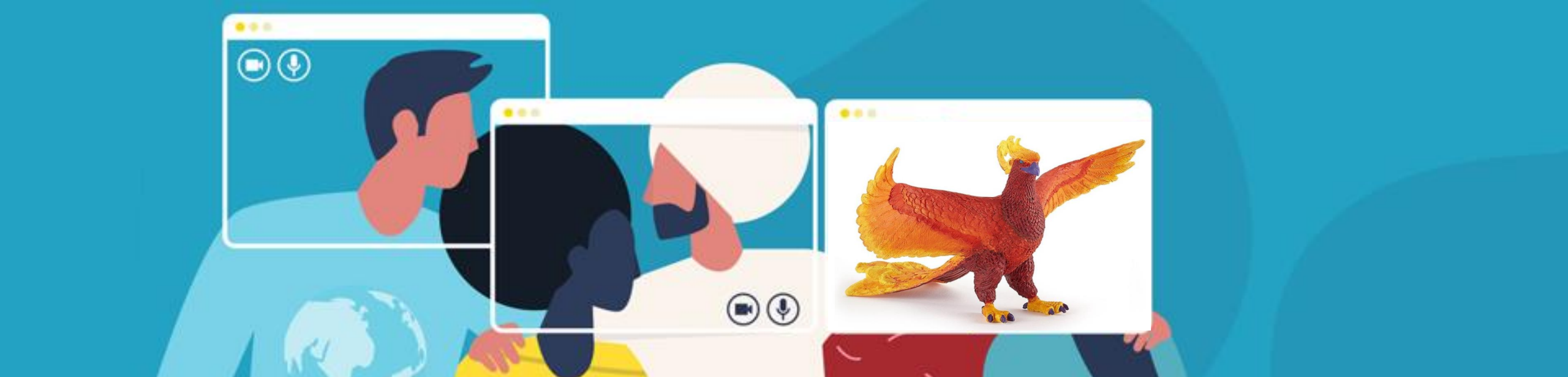




FHIR messaging

Michael Johansen, MedCom



HL7 FHIR DevDays 2020, Virtual Edition, November 17–20, 2020 | @FirelyTeam | #fhirdevdays | www.devdays.com/november-2020

ORGANIZED BY **firely**

Who am I?

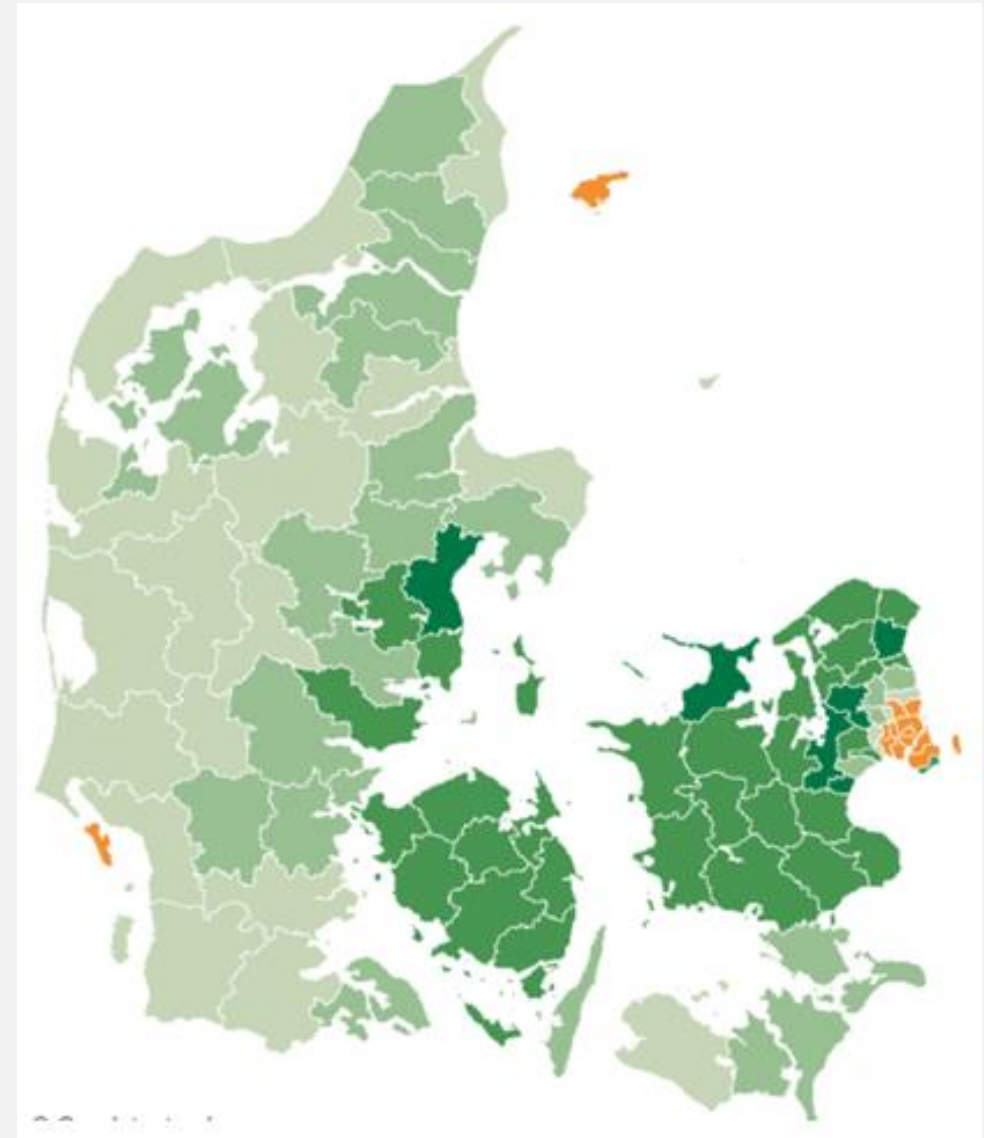
- Michael Johansen
- MedCom is a Danish SDO since 1994
 - Ministry of Health & Health Authorities
 - 5 Regions & 98 Municipalities
- Teamleader for the MedCom Standardteam
 - Produce Standards
 - Perform Test/Certification
- Run then backbone Healthcare Infrastructure
- Facilitates implementations and run Pilot Projects



✓ NONPROFIT
✓ CROSS SECTOR
✓ ALL IT-VENDORS (153)
✓ STANDARDS (194)
✓ INFRASTRUCTURE
✓ NATIONWIDE
✓ PRACTICAL IMPLEMENTATION
✓ TELEMEDICINE

Legacy of Messaging

- Diversity is not about Size
 - E-Prescriptions as Danish Pilot Project in 1989
 - MedCom established in 1994 (on EDIfact)
 - Referrals and discharge letters
 - Lab orders and reports
 - Reimbursement
 - MedCom on XML in 2005 (national standards)
 - Strategy was harmonization cross Public Domains
 - MedCom on HL7 in 2015
 - Document sharing with CDA
- Standardization is a never-ending Proces

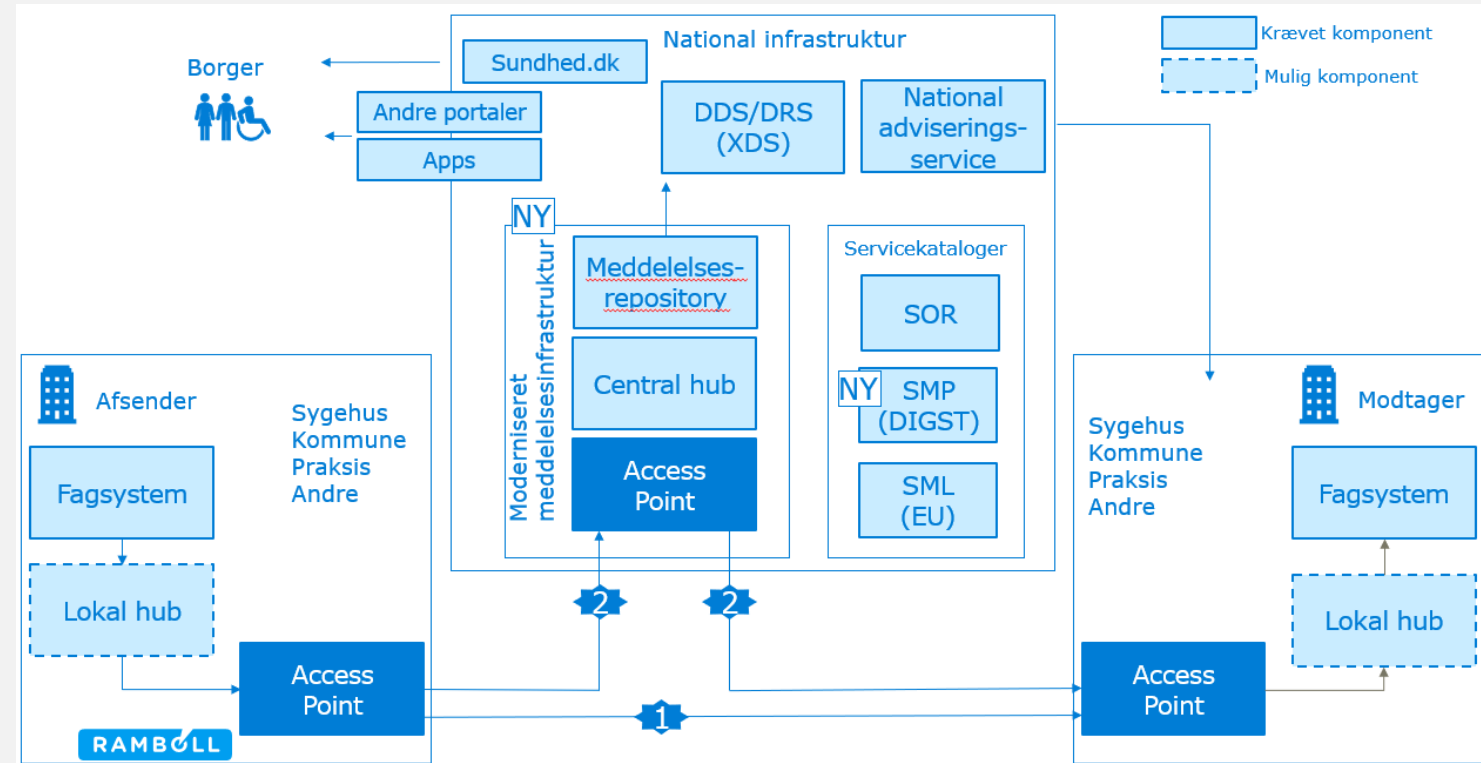


Modernization of Infrastructure

- National Service Platform (NSP)
 - IHE XDS Document Sharing for Homemonitoring, Appointments, Careplans, ...
 - Repositories for Medicine, Lab Orders and Reports, Referrals, ...
- Messaging
 - Privately operated network, addressing messages with GLN
 - Migration to eDelivery (EU project, cross Country, cross Domains)
- Trend is more Sharing and less Messaging
- Co-existens of Sharing and Messaging in the Future

Combined Infrastructures

- Access for Health Portals
 - Sharing Documents
 - Patients and Clinicians
 - Apps for Citizens
- Messaging intercepted
 - FHIR Messages
 - eDelivery for Transport
 - Stored in FHIR repository
 - Upload to IHE XDS
- Proof-of-Concept in 2018



Modernization of Messages in 2020

- FHIR Messages

- Notification of Hospitalization (admission, discharge, ...)
- Care Communication (“Clinical E-mail”)
- Receipts

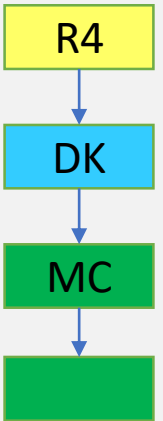


- More Standards/Versions/Technology in parallel is expensive
- Transition from legacy is complicated
- Loose Coupling between Standards and Infrastructure is good
- Big Bang Implementations is Utopia

Danish part of the FHIR Community

- Danish core Profiling
 - Patient Ressource R4.0.1 (Coordinated by FHIR SIG in Danish HL7 affiliate)
 - Consensus for different FHIR paradigms (REST, Document, Message)
- MedCom core for Messaging
- Actual Messages

- Publication of Profiles from GitHub to Simplifier (National Repository)
- FHIR Servers with IG for Profiles
- FHIR Terminology Server (also for other purposes than FHIR message)



Notification of Hospitalization

- MessageHeader
- MessageHistory
 - Provenance (reference to prior message, in reply or forward scenario)
- Patient
- Organization
- Encounter (EpisodeOfCare Identifier)

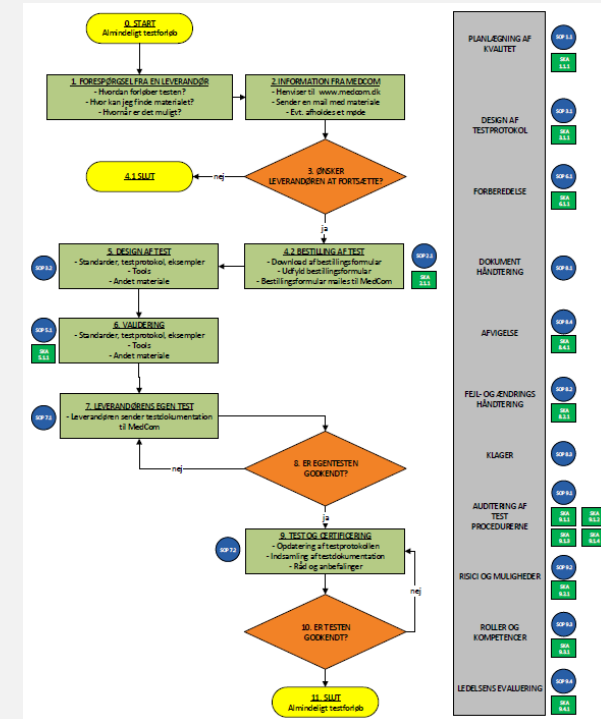
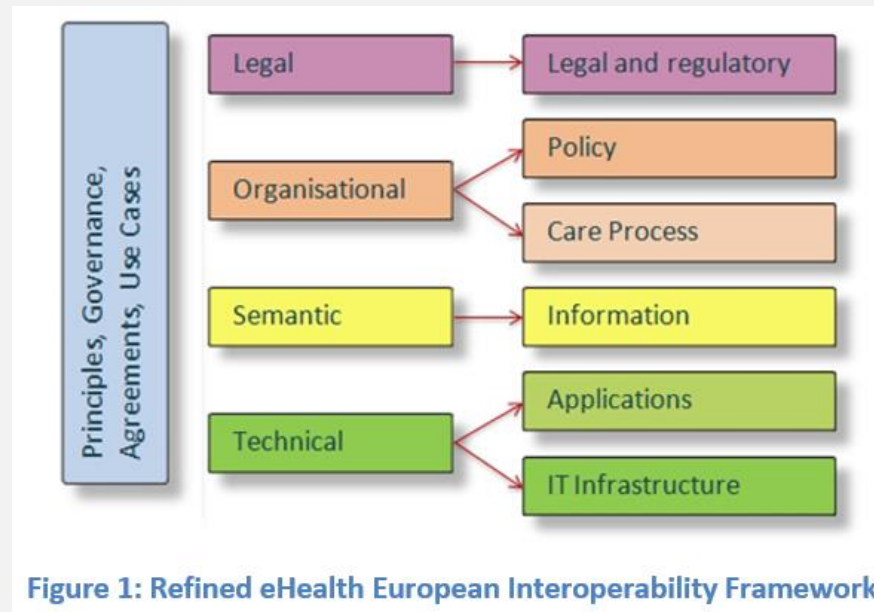
- MedComHospitalNotificationMessageActivities

Care Communication “Clinical E-mail”

- MessageHeader, MessageHistory, Patient, Organization
- Communication (considered Composition)
 - Status
 - Priority
 - Attachment
- MedComCareCommunicationMessageActivities
 - Category used to distribute/sort/filter at receiver
- MedComCoreAttachmentMimeType

Test and Certification (semantic interoperability)

- Touchstone Testtool
 - Self-test of Standards and Flows of Standards
- Procedures ISO9001 Certified
 - Interoperability Test
 - MedCom Test Lab



Contact

- During DevDays, you can find / reach me here:
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FHIR profiles



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Touchstone



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Q&A

- What took you so long in Denmark?
 - How long is the transition period from the legacy?
 - Will transition be done with use of (bad) mapping?
 - When will Denmark be interoperable with the rest of the World?
- Show us your IG?
 - <http://build.fhir.org/ig/hl7dk/dk-medcom/index.html>
 - <https://simplifier.net/MedCom-FHIR-Messaging>

