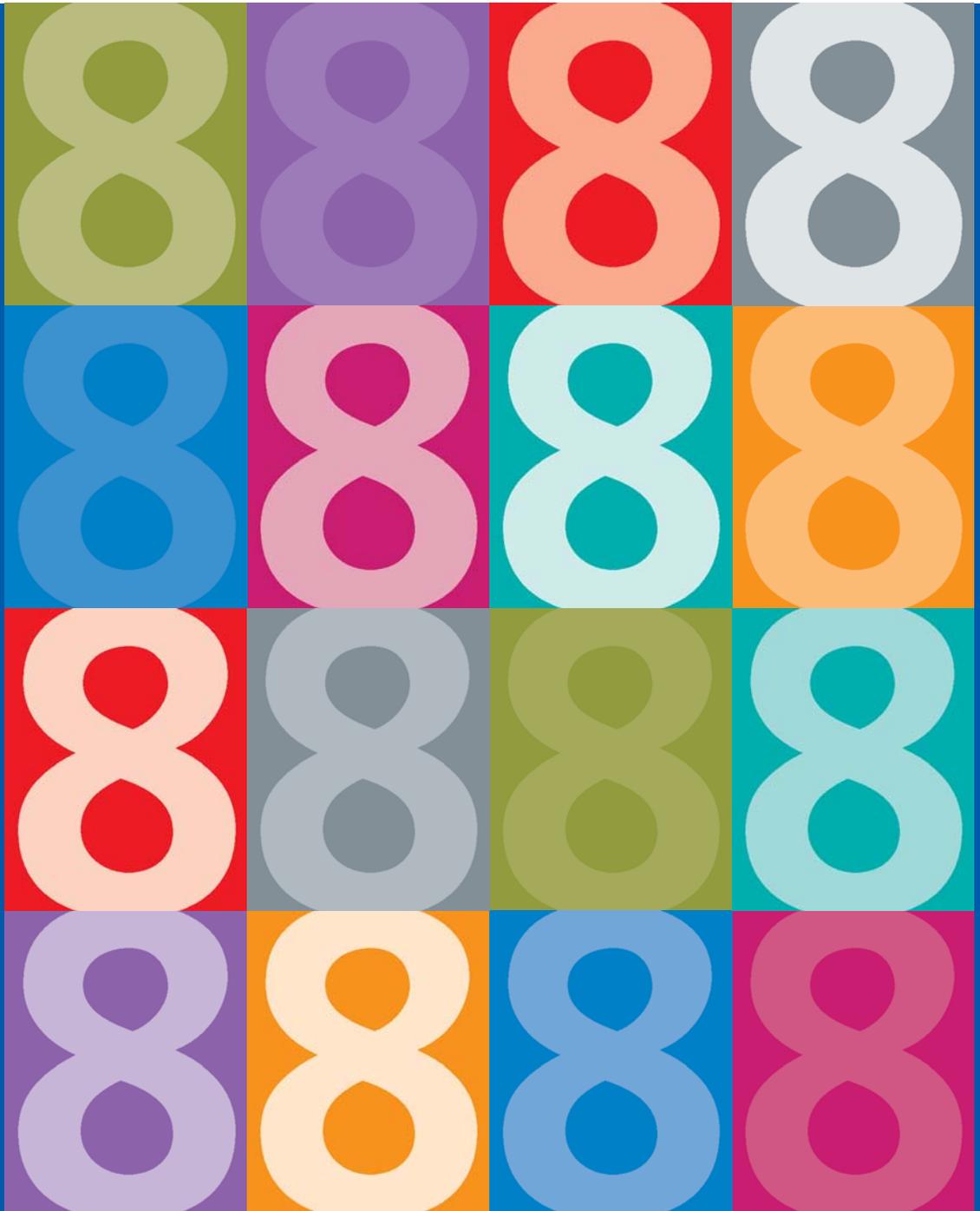


MedCom8



**Dissemination and
technological
future-proofing
2012–2013**

MedCom8 – 2012–2013

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MedCom8 – Consolidation and new goals

Since the establishment of MedCom in 1994, MedCom's role has been to *"contribute to the development, testing, dissemination and quality assurance of electronic communication and information in the healthcare sector with the aim of supporting the good patient process"*.

During the MedCom7 period, MedCom message no. 500 million was dispatched. This outstanding number reflects the success of MedCom in performing its role, as well as its major contribution to binding together the Danish healthcare service.

Through the regional finance agreement for 2011, MedCom's profile was raised further. This agreement states that "MedCom is being continued on the basis of the politically established goals and milestones concerning inter-sectorial communication and with a clear role as an executive organisation".

The agreement reflects MedCom's specialist expertise and many years of experience of developing and implementing specific projects across the Danish healthcare service, often involving many collaboration partners.

The activities in the MedCom8 programme consist of tasks from external sources with fixed objectives and time frameworks to a greater degree than was previously the case. The programme therefore includes projects that are established in the finance agreement for 2011, regional milestones for healthcare IT, the inter-municipal digitalisation strategy, etc.

"MedCom is being continued on the basis of the politically established goals and milestones concerning inter-sectorial communication and with a clear role as an executive organisation".

Many other projects that have already been commenced are also being continued. Among other things, this involves the work to roll out the Common Medication Card (FMK) among GPs, establish a Chronic Patient database and disseminate MedCom communication to all regions and municipalities.

MedCom8 also looks to the future. For example, a service inspection is being initiated which will future-proof MedCom communication, making it more standardised and more closely linked to other IT infrastructure developments within the healthcare service. This is an important aspect of the work to ensure that MedCom can continue to create coherence in patient treatment across the healthcare service sectors.

Overall, the content of MedCom8 helps to emphasise that MedCom remains a dynamic and solution-oriented organisation, which is a major contributor to the development of the Danish healthcare service to the benefit of patients and staff alike.

**Head of Department
Vagn Nielsen**
Ministry of Health
and Chairman of MedCom's
Steering Committee

Effective collaboration based on shared knowledge

Patients suffering from chronic diseases have both a long-term and a permanent need for treatment, rehabilitation and follow-up from many healthcare providers. An appropriate process requires the involvement of the patient and communication without deficiencies.

From the moment a citizen goes to see the doctor, possibly referred, admitted and discharged for rehabilitation, electronic communication will begin to take place between the healthcare providers involved. Very few citizens are aware of, or have any need to know, the extent of the activities in the Danish Healthcare Data Network.

For citizens with chronic diseases such as heart disease, COPD and diabetes, the situation is however rather different. They need permanent follow-up, treatment, referral to preventive measures and active involvement in the process. Above all, they need all communication concerning their illness to be up-to-date and to run smoothly.

The Danish National Board of Health has issued guidelines for the way in which the collaboration concerning the patient process should be optimised with the

GP as the hub. This has taken place on the basis of process programmes for chronic diseases. Altered requirements for the organisation of the inter-sectorial collaboration is also giving rise to modified requirements for IT support.

Common Chronic Patient Data is MedCom's proposal for the way in which these requirements can be met. The database has been developed and defined as a common standard in collaboration with the parties within the healthcare sector. The database is intended to ensure that relevant knowledge concerning the disease is available every time the citizen contacts the healthcare service. One aim is to reduce the number of unnecessary admissions and duplicate examinations. It is also important that the patient is actively involved, and that interaction and collaboration between the healthcare providers are improved.

The database will be tested in daily operation at several locations across the country before the end of 2013. After correction, the standard will be disseminated nationally.

Patient involvement

"In the vast majority of cases, the necessary data is already available in the healthcare service's electronic systems, e.g. the Common Medication Card and the Laboratory Portal," explains Consultant Svend Juul Jørgensen, who is chairman of the specialist medical group behind the development of the standard.

The database will contain at least the following information:

- Basic data
- Name of the GP
- Names of relatives
- Investigations by the GP
- Contact people at the local authority and hospital
- Relevant diagnoses
- Relevant laboratory results
- Current medication
- Relevant notes from hospitals, local authorities and doctors
- Booking of services (treatment, preventive and rehabilitation services)
- Monitoring data (weight, blood sugar level, etc.)
- The citizen's consent
- The citizen's calendar
- The citizen's diary
- The citizen's personal goals

"The information is collated in Common Chronic Patient Data, which the GP creates. Relevant data is then collated automatically from the various sources and made available to the hospital and local authority, so that they also have the necessary information from the moment the citizen makes contact.

It is the GP who must inform the patient about his or her rights to access and influence the content of the data that is presented in Common Chronic Patient Data.

"The citizens themselves are an important source of the content of the medical records," says Svend Juul Jørgensen. "The person concerned must among other things transfer the telemedical data that is measured in their own home, e.g. blood pressure, pulse and lung capacity. It will also be possible to write personal notes, which the healthcare providers can then follow up on.





The plan is for clinicians to access data concerning chronic patients via their own medical records system. Right from the start, the database will be available via The Danish eHealth Portal to both citizens and the clinicians who do not have Common Chronic Patient Data integrated in their own medical records systems.

One to carry, another to fight

39-year old Claus Due Eckhausen is a patient and a member of the target group for Common Chronic Patient Data. For 17 years, the diagnosis of Morbus Crohn, a chronic inflammatory bowel disease, has been affecting both his private life and his working life.

“During the long process, I’ve been through the mill and back again,” says Claus Due Eckhausen. “From the first symptoms and contact with the GP, through admission to three hospitals, check-ups and medication to the finan-

cial implications of not being able to work full-time for many years.”

Claus Due Eckhausen can easily imagine an “active” medical record, which would enable him to follow his case, keep a diary and record his medicine consumption and other relevant information on an ongoing basis. He believes it would mean that as a patient he would no longer have to tell the same story over and over again to different and new contacts on his way through the healthcare system.

“At the moment, I am not taking any medicine and in a flexi-job, and it has taken a lot out of me to get to where I am now. I’ve been through the various systems, and I have had to explain and defend myself, for example in relation to the local authority follow-up. For me as a chronic patient, it is vital that I know what the situation is and why it is like it is. It’s my life after all! A chronic disease is a demanding commitment,

which takes up a lot of time and effort, and it is clear that both myself and other chronic patients want as much insight and relevant information as possible.

“You need to be in good health in order to be a patient with a chronic disease,” says Claus Due Eckhausen.

Process programmes – a definition

Process programmes describe the collective inter-disciplinary, inter-sectorial and coordinated healthcare provision for a given chronic condition, which ensures the use of evidence-based recommendations for the healthcare provision, a precise description of task delegation and coordination and communication between all the parties involved.

Danish Process programmes for chronic diseases. National Board of Health, 2008

National coordination

Common Chronic Patient Data is pivotal to the National Board of Health’s process programmes. The nationally coordinated initiative is based on a grant of DKK 650 million, which in 2009 the Danish Parliament decided to allocate to a reinforced initiative for patients with a chronic disease.

1.1 Common Chronic Patient Data

Background

The aim of the Common Chronic Patient Data project is to support the implementation of the National Board of Health's process programmes for citizens with a chronic disease.

The database will form a common medical reference framework for the co-operation between general practitioners, hospitals, local authorities and citizens through a long-term chronic disease process.

The project is being led by a special steering committee consisting of the National Board of Health (SST), the Danish National Board of Digital Health (NSI), Danish Regions (DR), the Regional eHealth organisation (RSI), the National Association of Local Authorities in Denmark (KL), The Danish eHealth Portal and MedCom. A broadly composed working group is also being appointed, which consists of the project leaders from each of the participating projects, as well as selected experts, and two working groups: one medical and one technical.

The aim of the project is to develop and implement a national standard for the sharing of data concerning chronic patients. It is also anticipated that a common national chronic patient infrastructure will also be established at part of the National Service Platform, NSP.

Participants in the project are:

- All regions and selected local authorities.
- SST, NSI, DR, RSI, KL.
- A number of providers in the regions and municipalities.
- The Danish eHealth Portal.

About the project

The aim of the project is to validate and implement Common Chronic Patient Data in a number of chronic patient projects.

As part of this, RSI's large-scale project in the North Denmark Region, The Region of Southern Denmark's Chronic Patient Project has, like KL, decided to expand the chronic patient database to include local authority rehabilitation needs.

In addition, input to the database will be provided by Clinical Integrated Home Monitoring, as well as other existing regional and local authority projects within the chronic patient field.

A standard which has been approved will be established and documentation will be prepared.

The communication will be supported by test tools, as part of MedCom's general test centre function.

On the GP side, MedCom will manage the coordination of medical systems and the implementation in medical practice.

Deliverables in the project:

- Chronic Patient standards V0, V1 and V2.
- Testing and certification.
- Guide to National Services.
- Education and information to providers and project participants.
- Implementation of Common Chronic Patient Data in medical practice.

Your tasks

Regions and local authorities:

- Participate with chronic patient projects and appoint a contact person from each project.
- Ensure the implementation of Common Chronic Patient Data among the region's IT providers.
- Ensure the use of Common Chronic Patient Data in the region (hospitals).
- Secure the dissemination of Common Chronic Patient Data.
- Participate in MedCom's coordination and development of Common Chronic Patient Data.

National Board of Health:

- Participate in the steering committee.
- Provide healthcare-related input to Common Chronic Patient Data.

National Board of Digital Health:

- Participate in the steering committee.
- Establish the technical chronic patient infrastructure as part of NSP.
- Participate in the preparation of a Guide to National Services.

Participating providers:

- Implement and integrate Common Chronic Patient Data in your own IT system.
- Update the common national database.

KMD:

- Test system.

Schedule – key milestones 2012–2013

		1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
National infrastructure	1. Chronic patient standard and test system	V0		V1				V2	
	2. National infrastructure								
Projects	1. Organisation and agreements								
	2. System development and integration								
	3. Pilot operation								
	4. Dissemination								

1.2 Clinical Integrated Home Monitoring (CIH)

Background



By increasing the number of self-help patients, the health-care service can become more efficient. This could for example take place through the use of telemedical solutions such as home monitoring and video consultations. This could help to reduce the number of outpatient appointments and hospital admissions. The patient will also play a more active role in his or her treatment, known as 'patient empowerment': better prepared patients with reinforced self-care.

Telemedical support of the clinical work can improve the coherence in patient processes and in the cooperation between sectors in particular. By creating insight into and an overview of the patient's disease process, resources can be saved and it might also be possible to improve the effect of treatment. The medical staff in the various sectors achieves a common coordination of the patient process, helping to improve many processes to the benefit of both the patient and the staff and generating socio-economic benefits.

About the project

Clinical Integrated Home Monitoring (CIH) is a coordinated project under the direction of the Danish Public Welfare Technology Fund (FFVT). On behalf of FFVT, MedCom has brought together three applications in a single project with the aim of strengthening the inter-sectorial and data-integrating focus. In the project, IT solutions are tested and demonstrated with an emphasis on integration between existing IT systems and telemedical home monitoring, as well as other solutions that support the patient's active involvement.

CIH consists of eight sub-projects:

- Evaluation (University of Southern Denmark and the National Board of Health).
- Pregnant with complications (Central Denmark Region).
- Diabetes (Central Denmark Region).
- COPD (The Capital Region of Denmark).

- Pregnant without complications (The Capital Region of Denmark).
- Gastro-intestinal inflammation (The Capital Region of Denmark).
- Technology/standard development (MedCom).
- Programme management (MedCom).

Project participants:

- Healthcare personnel and therapists in the project municipalities: Aarhus, Copenhagen, Gladsaxe and Vestegnen local authorities.
- Doctors and other personnel in participating medical practice.
- Doctors, nurses, midwives and medical secretaries at the following hospitals: AUH Skejby, Bispebjerg, Frederiksberg and Herlev.
- IT staff in the Central Denmark Region and The Capital Region of Denmark.

The total budget is DKK 65 million, with a grant from FFVT of DKK 33.4 million.

Your tasks

Organisation of the project:

Steering committee with chairmanship in the Central Denmark Region. Aarhus University Hospital, Aarhus Municipality, Aarhus University, The Capital Region of Denmark, MedCom, Herlev Hospital, Hvidovre Hospital, GPs, FFVT, KL representative, National Board of Health (observer) are also participating.

Programme leader: MedCom.

Project coordinators: Central Denmark Region and The Capital Region of Denmark

Sub-project participants: Local project leaders for each sub-project.

Project leader group: Programme leader and sub-project leaders.

The CIH project is closed to further participants.

Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Technical preparation and pilot testing								
2. Initial operating phase								
3. Half-way evaluation								
4. Second and third operating phases								
5. Evaluation of sub-projects								

2.1 E-record and GP-record. Continuation and dissemination

Background

In the future, access to medical record data from hospitals and medical practice will be gained via the National Patient Index (NPI) and the National Health Record at The Danish eHealth Portal. In order to support these initiatives, the work to disseminate the use of E-record and establish GP-record will continue during MedCom8.

E-record has become part of the clinical workplace at all Danish hospitals. They give clinicians both at hospitals and in general practice the opportunity to gain access to clinically relevant information across hospitals. Via E-record, citizens can also gain access to their own patient records and thereby learn more about their own illness. This will promote the active participation of citizens in treatment and self-care.

MedCom is responsible for project management and the operation of E-record.

At the beginning of 2012, E-record will be supplemented by GP-record, which shows clinical information from general practice and specialist medical practice.

The work relating to both E-record and GP-record is anchored in the steering committee of the National Health Record and is primarily expected to cover the following activities:

- Operation and development of E-record will be put out to tender.
- Data from individual providers will be subject to quality assurance.
- Many EPJ systems will be phased out, and here E-record has been chosen as a container solution, so that data can be archived and provide historical value.
- The Danish State Archives have chosen E-record as a data provider for the archiving of medical records.
- The National Health Record/NPI is being established by The Danish eHealth Portal/National Board of Digital Health. E-record and GP-record will supply data to both.

About the project

The aim of the continuing development, operation and dissemination of E- and GP-record is to create access to electronic medical record data from hospitals and medical practice. This will ensure consolidated data sources for the future National Health Record.

Participants in the project are: the five regions, Danish Regions, the Danish Regions' Healthcare IT organisation, National Board of Digital Health, General Practitioners Organisation (PLO) and The Danish eHealth Portal.

During MedCom8, MedCom will:

- Put E- and GP-record out to tender.
- Disseminate the use of E- and GP-records at hospitals and private hospitals and in medical practices, as well as at emergency medical clinics and among citizens.
- Quality-assure the data delivery from hospitals and practice, e.g. by establishing online validation services.
- Establish toolboxes for targeted dissemination to the various target groups and arrange MedCom road shows.
- Adapt E-record, so that EPJ systems that have been phased out can deliver and archive data.
- Establish extracts of data from E-record to the Danish State Archives, so that this information is saved for posterity.
- Establish data extracts and services for the National Health Record and NPI.
- Disseminate experiences to the National Health Record and NPI.
- Disseminate the National Health Record when it replaces E-record.

Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. E-record put out to tender	Preparation	Invitation to tender documents	Selection of provider	Development	New operation of E-/GP-record			
2. Dissemination kit for hospitals, practices, emergency doctors and citizens	Preparation	Dissemination	Dissemination, specialist doctors	Dissemination, emergency doctors	Dissemination, citizens	Dissemination, practices	Dissemination, hospitals	
3. "The good E-record delivery"	Written	Consolidation	Consolidation	Consolidation	All systems ready			
4. Collaboration agreement with NPI and the National Health Record concerning data delivery	Signed	Establishment of services	Establishment of services	Establishment of services	All systems ready			

Your tasks

In MedCom8, the five regions should:

- Participate in the National Health Record steering committee.
- Participate in the E-record user group.
- Participate in the E-record operation and technology group, particularly when the region is involved in changes.
- Actively participate in the consolidation of the existing data extracts.
- Collaborate with MedCom concerning relevant dissemination activities for E- and GP-record and later National Health Record, if MedCom is selected to disseminate this.
- Deliver data from relevant EPJ systems which are being phased out.

The five regions should also continue to:

- Ensure 24-hour "operation" of extract servers.
- Establish extracts from new and withdrawn systems.
- Be responsible for auditing user look-ups.
- Manage the regional administration of access to and disclosure of data.
- Disseminate use at hospitals.
- Serve the region's citizen mailbox.
- Pay for joint operation, maintenance and development.

If appropriate, an actual E-record "administration organisation" should be established, which can handle administration, auditing and ongoing enquiries.

Other organisations in MedCom8:

- The General Practitioners Organisation should participate in the work to improve and disseminate the records.
- National Health Record and the NPI project leaders should coordinate link-up activities with E-record and other data sources.

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3.1 Dissemination of home care-hospital communication

Background



A good discharge starts with a good admission report, ensuring that no information is lost. The information that is to be exchanged is set out in health and collaboration agreements between regions and local authorities.

In MedCom’s four communication standards concerning admission/discharge, a common database to describe functional ability is on the way. A limited and structured description forms the starting point for the organisation of the care and helps to create a common framework of documentation and understanding across sectors. Collectively, the home care - hospital standards contribute to security and continuity for the citizen.

The four communication standards are:

- Admission report** from the home care to the hospital.
- Care process plan** from the hospital – states whether changes have occurred during admission/notification via this standard.
- Notification of completion of treatment** – an administrative service message.
- Discharge report** from the hospital to the home care.

About the project

Objectives:

- All relevant providers tested and certified.
- Professional validation following organisational pilot implementation completed.
- All regions and municipalities using the standards.

During 2010 and 2011, MedCom has focused on the development, testing and pilot implementation of the home care - hospital standards. During 2012–2013, the work to collate the organisational pilot experiences and national dissemination of the standards will continue. This dissemination is anchored locally and supported by MedCom’s national coordination and technical test centre.

Work is under way on care documentation in various contexts; in MedCom’s standards, the content is defined by a national working group. MedCom is monitoring developments in the documentation of functional ability within Common Language III, quality standards (IKAS) and national initiatives (e.g. the action plan for the older medical patient).

Medical information which is made available via the Common Medication Card (FMK) will be phased out by the standards when FMK is widespread among the local authorities.

Your tasks

- Make your hospital or local authority ready to implement e-communication in connection with admissions and discharges.
- Contact your region or MedCom in order to obtain the status of existing collaboration concerning electronic communication.

Regions and local authorities have the following overarching tasks in relation to the project:

- Prepare a project plan and schedule for implementation and ensure management back-up for internal implementation.
- Enter into a contract with a provider concerning the purchase and a schedule for the delivery of interfaces.
- Check that the IT provider is MedCom-certified.
- Draw up a plan for collaboration with the IT and training departments.
- In a local project plan, describe “who will do what within your own organisation”. Contact MedCom for a checklist for preparation.
- Ongoing coordination locally with the collaborating hospitals/local authority.
- Update VANS provider.
- Carry out a test dispatch from your own system to MedCom’s test centre by agreement with your own provider.
- Carry out a test dispatch between the hospital and the local authority.
- Disseminate use to the entire hospital/local authority.

Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Certification of the providers								
2. Information meetings and seminars across the country								
3. Collation following organisational pilot implementation								
4. Testing and certification of the providers following revision of the standards								
5. Operation, support and follow-up of dissemination								

3.2 Dissemination of rehabilitation plans, including citizen access

Background

Electronic rehabilitation plans, e-GOP, are exchanged between region and local authorities and GPs using MedCom's GOP standard or through conversion to correspondence format. The use of correspondence messages involves limitations for clinical users, as there is limited space for data in the correspondence.

GOPs are currently sent from all five regions. Since December 2011, 60 local authorities have been able to receive GOP format, while 35 local authorities receive via correspondence format. GPs receive the statutory copy of rehabilitation plans in correspondence format. Private hospitals and privately practising physiotherapists send and receive rehabilitation plans in hard copy format.

Local Government Denmark wishes to give citizens access to e-GOP. This possibility is being investigated in connection with the establishment of a chronic patient solution, which is being coordinated with the work relating to the National Service Platform.

During the impending period, MedCom will focus on offering clinicians an update of the standard for rehabilitation plans in order to meet a desire for more writing space.

About the project

Objectives

- The field sizes in the standard for rehabilitation plans are being expanded, so that clinical users can attach copies of medical record notes and operation and X-ray descriptions.
- All local authorities and regions receive e-GOP via MedCom's specific standard for rehabilitation plans.

For the time-being, GPs will continue to receive in correspondence format. It must therefore be ensured that doctors can still receive when the quantity of data in e-GOP is expanded.

Citizen access is being established for personal rehabilitation plans, either through the use of other MedCom solution models or through other national solutions. Citizens will be able to view these plans via The Danish eHealth Portal.

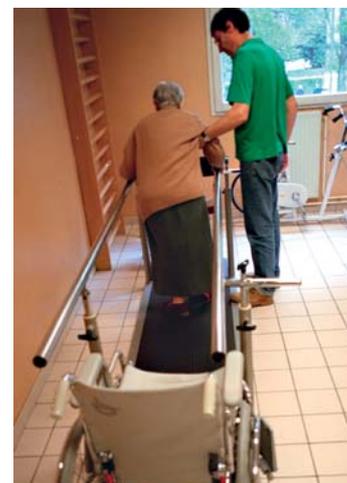
The use of GOP among private hospitals and privately practising physiotherapists will be shared. The implementation of e-GOP or the use of a hotel solution among these parties will presumably take place as demand among regions and local authorities increases.

Under way with the project

MedCom is expanding relevant fields in the standard for rehabilitation plans and publishing a new version.

All relevant providers will then be tested and certified in accordance with a common schedule, and a date will then be set for a version changeover. Regions and local authorities will support requirements concerning certification and will reach agreement locally to receive via MedCom's specific standard for rehabilitation plans.

It will be clarified how citizen access will be facilitated at The Danish eHealth Portal. The choice of solution will be coordinated with other solution models which are either in use or being developed, e.g. the chronic patient platform.



Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. GOP standard fields expanded in a new version								
2. Providers tested and certified for the new version								
3. Regions/local authorities agree on the use of GOP								
4. Citizen access to own GOP established								
5. Dissemination of citizen access and follow-up								

3.3 Dissemination of LÆ forms

Background

Via a social-medical collaboration, relevant information will be exchanged between local authorities and doctors with the aim of optimising case processing for citizens. This information is exchanged using LÆ forms, established by the Danish Medical Association's Form Committee and KL.

MedCom has developed and documented a standard for Dynamic Forms (DDB 1.0), as well as 'The Good LÆ Service', which manages the electronic communication of LÆ forms.

The electronic communication of

LÆ forms is part of KL's inter-municipal digitalisation strategy to expand MedCom communication to cover local authorities by the end of 2013. The PLO agreement dating from April 2011 contains a joint framework agreement which encompasses the exchange of electronic LÆ forms between local authorities and GPs.

The MedCom standards are implemented by a single provider of local authority form solutions (EG Kommuneinformation A/S), as well as by a number of medical system providers. The standards

contain provision for the communication of several form types to and from the medical practice records and for a number of providers of local authority form solutions to communicate LÆ forms with the medical practice systems.

As of January 2012, 50 local authorities and approximately 1,000 medical practices send and receive electronic LÆ requests. A DDB editor (an application to generate forms in DDB format) has been fully developed and disseminated.

About the project

The LÆ form project within MedCom8 will focus on the continuing dissemination of LÆ communication among general and specialist medical practices and local authorities.

Deliverables:

- Implementation in all medical systems completed:
 - a. The Good LÆ Service.
 - b. The DDB 1.0 framework standard.
 - c. Attachment of files to forms.
- Dissemination among general practice and relevant specialist medical practices concurrently with local authority dissemination.
- Transfer of follow-up and monitoring tasks to the operating organisations.
- Support for implementation of the standards by further local authority form providers.
- Support for local authority dissemination.
- Dissemination of DDB editor.
- Mapping of the need for electronic LÆ forms at hospitals.

Your tasks

Local authorities:

Purchase of module or web-based solution for the communication of LÆ forms. Agreement with MedCom concerning dissemination to the local authority's doctors concurrently with start-up.

Medical practice:

Contacted by MedCom or by the medical system provider as the local authorities begin to send electronic forms. See: <http://www.medcom.dk/LÆ-vejledning>

Providers:

Implementation of standards for DDB 1.0 and The Good LÆ Service.

Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. DDB editor disseminated								
2. All medical systems ready for dissemination								
3. Monitoring transferred to operation								
4. Dissemination to general and specialist medical practices								
5. Dissemination to all local authorities								

3.4 Dissemination of notification of births to the local authority health service

Background



When a birth takes place at a hospital, the maternity ward will send a notification of birth to the local authority healthcare service in the woman's home municipality. In the notification of birth, the hospital gives information on the child or children, as well as on the pregnancy and the birth itself. This information is used by the local authority to set up the child's/adolescent's records, which form the basis for the further process within the local authority healthcare service, including the work of the health visitors.

The Finance Agreement 2010:

By the end of 2012, the electronic dispatch of notification of births to local authority healthcare services will have been fully implemented at the hospitals of all regions.

KL digitalisation strategy:

Existing MedCom messages will be disseminated to all local authorities. The aim is for all local authorities to use virtually all the MedCom standards by the end of 2012.

Benefits:

The hospitals will benefit from less paperwork, a more efficient workflow and faster dispatch of messages. There will also be fewer telephone calls from parents and better professional interaction between local authorities and hospitals. The local authorities will also benefit from less paperwork and receive fewer telephone calls. The receipt of messages will be accelerated and ensure punctual, more uniform and better local authority responses.

About the project

Objectives:

- By the end of 2012, all regional childbirth centres will send electronic notification of births to all local authority healthcare services that are able to receive them.
- All municipal healthcare services will receive birth notifications electronically by the end of 2013.

The solution:

The communication takes place via the VANS network using MedCom's EDIFACT or XML standard for notification of births, D3234L or XD3234L. The VANS provider will be responsible for conversion.

MedCom's input:

- As of February 17th 2011, MedCom has prepared an up-

dated version of the notification of birth, as well as an XML version following consultation with the regions and providers of local authority child medical records.

- Test tools are ready.
- MedCom will contribute to the dissemination work among the hospitals as the coordinator of the Danish Regions' Healthcare IT organisation's milestone concerning the dissemination of all MedCom messages.
- Testing and certification of relevant systems (The Good Notification of Birth/VANS envelope).
- Information and dissemination initiative in relation to all the country's local authorities in collaboration with KL.

Who is involved:

All regions (relevant PAS/EPJ systems) and all local authorities (NOVAX, TMSund, MyClinic and Aalborg Municipality's own children's records).

Your tasks

- Participate in MedCom's regional project leader group.
- Coordinate locally (at regional and local authority level) in relation to health agreements and management anchoring.
- Purchase interfaces for hospital systems and child medical records respectively, and test.
- Lead the project concerning implementation and coordination locally in collaboration with the IT organisation and training functions.

Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Relevant systems tested/approved								
2. All regions to have purchased the module								
3. All regional birth centres dispatching								
4. All local authorities have purchased the module								
5. All local authorities receiving								

4.1 Dissemination of the Common Medical Card and Vaccination Database in the Primary Sector

Background



The aim of the project is to disseminate the Common Medical Card, FMK, for daily use in all consultations with general practitioners and specialist doctors. Another aim is to disseminate The Danish Vaccination Register, DDV, to general practitioners.

Benefits of FMK:

- Overview in busy daily life.
- Improved safety for correct dosage.
- Patients and citizens are better informed about their own medication.
- It should be possible to reduce medication errors.
- Confidence that information about medicines has been updated.

The "Focus on FMK" project is now finished. This means that the FMK has been developed and is ready for roll-out in all medical practices in the first quarter of 2012. The following 10 medical systems have developed an FMK solution: Profdoc Æskulap/XMO, Novax Windows, Web-Praxis, WinPLC, MedWin, EMAR, Docbase, Ganglion, MyClinic and MultiMed Web.

FMK is a new way of working and requires a change in procedures for healthcare professionals in connection with treatment by medication. FMK also introduces a range of new terms that users must learn.

Commissioning the systems therefore requires a considerable effort with technical installation of the solution, including access to the Health Data Network (SDN). Users can be trained in the use of the solution, and have follow-up and help with troubleshooting and correct use.

DDV is integrated into FMK, and the integration will be developed in relation to the medical systems. Via an electronic vaccination card, DDV creates a combined overview of the patient's vaccinations across sectors. The vaccination register is a quality management tool for the healthcare sector, and the register will contribute to achieving and maintaining quality and safety.

Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Agreeing with the regions on briefings and follow-up meetings								
2. FMK was launched in general practice in line with the regions' deployment of FMK in hospitals								
3. Dissemination of DDV in line with implementation of the systems								

About the project

FMK is disseminated among GPs and specialist doctors as part of a collaboration between MedCom and the individual regions. MedCom has agreements with all five regions. They proceed with training sessions and collection sessions relating to the medical systems that were not finally ready until the meetings held in autumn 2011. At the meetings, the system providers have the chance to demonstrate and visualise their solutions for users, and explain the interplay between the journal system and the centralised FMK solution.

The final demand for doctors to use FMK enters into force once the regions' hospitals have implemented FMK.

The Danish Vaccination Register (DDV) is disseminated among general practitioners and specialist doctors in relation to the medical systems that have developed and tested a module for handling the DDV.

In total, 2,093 medical practices and 983 specialist practices have to implement FMK and DDV.

The launch of FMK and DDV comprises:

- Preparation of information and user instructions aimed specifically at the individual journal system.
- Regional/local briefings for users.
- Sessions are held system-wise for users of the same system. All relevant users receive training.
- Systematic installation of the necessary software/technology on each individual system.
- Visits to users if required.
- Follow-up of sessions, hotline and patches.
- Use statistics.

FMK will also be disseminated to dentists and later in the municipalities (2013–2014). These two areas can be included as part of the project, if required.

Your/our tasks

The region's tasks:

- Arrange meeting nights, and send invitations to doctors.
- Make agreements with medical teaching staff.
- Make visiting appointments with doctors if necessary.
- Take part in project meetings at MedCom.

MedCom's tasks:

- Overall project management.
- Hold training sessions.
- Make agreements with the providers' trainers.
- Follow-up with hotline and user support.
- Statistics.



5.1 Dissemination of video interpreting in hospitals

Background



Both Danish and international experience point to video interpreting as a good and resource-saving alternative to face-to-face interpreting. Denmark has in particular used face-to-face interpreting where the interpreter is present during the conversation between patient/citizen and staff.

The video interpreting project's business case points to both financial and qualitative benefits from the use of video interpreting, for example:

- More effective use of resources and less transport time.
- Easier access to interpreters in emergencies and for smaller languages.
- Less probability that the interpreter and patient know each other.

The Danish Public Welfare Technology Fund supports the project with DKK 41 million.

About the project

The aim of the project is to disseminate video interpreting in the secondary sector and, at the same time, gain experience as regards to the potential for its use in the primary and municipal sectors. Video conference equipment must be regarded and used as a general tool in daily clinical work and, at the same time, increase access to interpreters.

The objectives by the end of 2012 are:

- That video interpreting will be used in 90% of all relevant hospital departments.
- That pilot projects are introduced in a minimum of 10 medical practices and a minimum of 10 pilot municipalities.

- That a national video hub has been established – a national video infrastructure.

Secondarily, the video equipment can be used for other purposes than interpreting.

MedCom takes care of overall project management and coordination, as well as information for regional and municipal project managers and interpreting providers. MedCom is also responsible for operation and support of the national video hub.

The project is collaborating with the Regional eHealth organisation, RSI, on the status, since RSI has corresponding objectives for implementing video interpreting in hospitals

Your tasks

In agreement with the Danish Public Welfare Technology Fund, it has been decided that the dissemination of video interpreting in hospitals will be carried out in cooperation with all five regions. They have each appointed a project manager for regional implementation.

Also, agreements have been made with 10 pilot municipalities, each of which has appointed a project manager.

The pilot projects in general practice have been implemented, and an evaluation report has been produced, which is available on request from MedCom or at www.medcom.dk.

Interested municipalities, general practitioners and interpreting providers can get help to start up from MedCom.

Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Video interpreting will be used in 75% of all relevant hospital departments								
2. Booking sub-project has been implemented								
3. Experiences gathered from pilot municipalities								
4. Video interpreting will be used in 90% of all relevant hospital departments								
5. Evaluation report								

5.2 Demonstration of telepsychiatry

Background

The government platform from 2011 points to psychiatry as a priority for the coming years, as regards to improvements in the health service. At the same time, cross-sectoral cooperation as regards to psychiatric patients is included as an area of special focus in healthcare agreements.

Several regions are considering how the widespread MedCom communication in the somatic area can be transferred to psychiatry. Internationally and to an increasing degree also nationally, good experiences have been had with telepsychiatry, including using video conferencing in patient treatment.

Telepsychiatry and electronic data exchange can support continuity of psychiatric care in several ways:

Intra-regionally:

- Hospital – Hospital
- Hospital – Community mental healthcare

Cross-sectorally:

- Hospital – Homes
- Hospital – Municipality
- Hospital – Medical practice

Interested parties:

- Child and adolescent psychiatry
- Geriatric psychiatry
- Adult psychiatry
- Homes
- Patients in own home

About the project

Three concepts for IT communication are evaluated to be ready to support psychiatry:

- E-communication reusing existing MedCom standards.
- Video communication.
- Internet-based self-help packages for patients in their own homes.

The content of the telepsychiatric sub-project is awaiting the implementation of RSI's telemedicine strategy, the national telemedicine strategy and the Danish Public Welfare Technology Fund's action plan.

As regards to the implementation of existing plans, the dissemination of MedCom messages in psychiatry will proceed as follows:

- 2012: Mapping activities
- 2013: Use

5.3 Dissemination of telemedical ulcer assessment

Background

From financial agreements between the municipalities and the government for 2012 it is evident that:

"Following the first positive experiences with tele-based care and cross-sectoral cooperation, the government will seek support from the signatory parties behind the Danish Public Welfare Technology Fund to earmark DKK 30 million over two years, in order to disseminate experiences gained from ongoing projects, such as telemedical ulcer assessment, prevention of pressure sores and any other initiatives that can replace routine home visits. There is

agreement to work towards a model for national implementation of telemedical ulcer assessment."

The area is also included as an initiative in the common public digitalisation strategy for 2011–2015.

In the current work with national telemedicine strategy and the Danish Public Welfare Technology Fund's telemedical action plan, consideration is being given to concrete implementation of the digitalisation strategy's ulcer initiative and the financial agreement's statement of intent.

About the project

Organisation, procedure and budget are awaiting the national telemedical action plan.



6.1 Dissemination of hospital referrals and REFPARC

Background

In MedCom7 an increased effort was made to ensure that all referrals for hospital treatment were sent electronically. There was special focus on developing a dialogue-based referral targeted at hospital "pathways", together with the option to attach files and dispatches to private hospitals, as well as to send e-referrals to municipal centres for disease prevention.

This work continues in MedCom8 and is one of RSI's guiding principles for 2012.

Today, around 70% of hospital referrals and 5% of referrals to municipal centres for disease prevention are sent as e-referrals.

A number of changes have been made in the existing standard for e-referrals and in systems in hospitals and general practices, and will be implemented all over.

This implementation will take place in 2012–2013 and includes:

- Option for longer referral text.
- Master data will be expanded.
- Referral information for pathways will be introduced in a new referral table, developed by MedCom.
- The content of the referral table will be standardised at a national level and codified.
- REFHOST will be further developed into REFPARC, so that pathways with attachments and referrals to municipalities can be handled.
- Further referral will be possible in REFPARC.



Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Implemented referral module in regions								
2. Medical systems will be developed and pathway referral module implemented								
3. Full dissemination of e-referral and booking reports in all regions								
4. REFPARC-development and launch. Road shows will be held in regions and municipalities								
5. Project manager meetings								

About the project

Implementation of improved dialogue-based e-referrals, so all referrals to hospitals, X-rays and municipal centres for disease prevention are electronic. All referrals go through a central referral hotel.

Objective:

- By the end of 2012, all referrals to hospitals will be electronic.
- All referrals forwarded from hospitals will be electronic by the end of 2013.
- Attachments can be used in hospitals.
- Pathways supported in referrals.
- Full use of booking reports in all hospitals.

Solution:

- The medical systems change the referral solution so a referral is prepared based on information from the referral table. The solution is being tested and will be launched in April 2012.
- The referral table is updated with information from the regions every 14 days.
- The regions adjust their referral solution, so longer texts and master data can be received from April 1st 2012. The attachment solution is clarified and deployed continuously by the regions. Booking reports are introduced universally.
- REFPARC is being developed so attachments can be seen by recipients who have not developed a solution. REFPARC must also be able to handle municipal centres for disease prevention for those municipalities that have no EDI solution. The solution is expected to be ready in 2012 and disseminated with the parties via regional road shows.

Your/own tasks

Regions:

- Appoint a project manager.
- Take part in MedCom's project management meetings.
- Acquire and implement an adjusted referral module by April 1st 2012 at the latest.
- Prepare a plan for full implementation of referrals and accompanying booking reports.
- Hold information events so full swap-over to e-referrals happens in 2012. Among other things, by participating in road shows.
- Investigate the use of paper referrals in all regional hospitals and take measures to eradicate this.
- Implement receipt of electronic attachments.
- Swap over to full electronic forwarding of referrals through REFPARC.
- Send constantly updated information on referrals and packages to MedCom.

Medical systems:

- Develop and test a solution for inputting and updating package tables.
- Develop dynamic package referral and test it.
- Disseminate the solution to customers with an update in April 2012.

Municipalities:

- Linked to the REFPARC solution so that receipt of referrals can be done electronically via REFPARC.
- Be able to participate in road shows if required.

MedCom:

- Maintains and makes referral table available in electronic form.
- Holds information and test sessions for suppliers if required.
- Prepare advice for displaying dialogue-based referral.
- Hold quarterly meetings with the regions to follow up on implementation.
- Prepare implementation statistics.
- Initiate development and use of REFPARC through regional road shows.

6.2 Dissemination of laboratory medicine

Background

Completion:

A large number of MedCom7 laboratory projects lack completion in the form of full implementation because a number of laboratories will not have installed the software until the end of 2011/start of 2012. Implementation is followed by monthly statistics and annual status meetings to ensure 100% performance.

The projects were previously described in the folder on MedCom7 laboratory medicine projects.

Further development:

Since the laboratory area is under constant development, there is a constant need for new functions to satisfy legislation in relation to handling paraclinical investigations in general and specialist practice, partly to reduce costs in the area.

Maintenance:

User groups for WebReq and the Laboratory report portal and preparation of codes and tables for the laboratory area are an integrated part of the development projects and are important for them. MedCom has chairmanship of these groups.

The regions' laboratories and national laboratories take part in all three areas, as well as medical systems, medical practice and the PLO.

About the project

Completion and maintenance:

Objectives:

MedCom7 laboratory projects in sub-projects 2, 3, 4, 7, 8, 10 and 12 will be completed. Most of them lack full deployment of installed software. Several regions will implement new systems in winter 2011/2012.

Solution:

- Full deployment is followed up with monthly statistics and overviews of progress.
- MedCom contributes with support and training during visits and telephone support, as well as holding an annual status meeting for all laboratories.

Objective:

- All MedCom7 laboratory projects are 100% disseminated in 2012.
- MedCom holds biannual user group meetings on WebReq and an annual one on the Laboratory response portal.

Further development:

Objectives:

To meet legislation requirements, streamline and exploit new options.

Objective:

The projects are fully disseminated by the end of 2013.

The following areas are developed:

- Doctors' own analysis results are shown in the Laboratory response portal.
- Standardisation of all laboratory codes in medical systems and in doctors' own analyses in WebReq.
- National Abbreviations (NKN) from Labterm is introduced as mandatory in WebReq and medical systems.
- New link to the medical handbook laboratory guidelines in WebReq and medical systems.
- Response to ordered laboratory tests to medical practice, cf. handling paraclinical investigations from the Danish National Board of Health.
- National disease-specific/symptom-specific standard profiles in WebReq and in medical systems.

MedCom contributes with project management, holds consensus meetings for relevant parties and follows up with regular status info.

Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Project management meetings, regions								
2. Users meetings								
3. Completed implementation of old lab projects				100%				
4. New development, consensus								
5. Implementation of changes in systems								

Your tasks

Completion and maintenance:

Regions and national laboratories:

- Implement acquired modules for MedCom7 laboratory projects.
- Implement all modules fully in all laboratories.
- Participate in maintenance meetings about WebReq and the Lab response portal.
- Participate in annual status meetings in MedCom.

Further development:

Regions and national laboratories:

- Appoint a regional contact person.
- Participate in project management meetings at MedCom.
- Agree on the introduction of national abbreviations in their laboratories.
- Get regional consensus on use of standard profiles.
- Get a software change in connection with response to requested tests for doctors and responses to these for patients.

Medical systems:

- Take part in preparing a model for response and follow-up of these responses to patients.
- Adapt the medical system to planned changes/further development, among other things, so that the same codes in the doctors' own analyses are entered in collaboration with MedCom and DAK-E data acquisition.
- Test changes in MedCom management.
- Implement changes.

PLO, Laboratory fields:

- Take part in preparing a model for responses.
- Take part in preparing standard profiles.
- Get consensus on use of standard profiles.



7.1 Involving other municipalities and regions in international projects

Background

MedCom’s international project line has its main focus on eHealth – both locally, nationally and internationally.

The project line covers networking, matchmaking between project ideas and project funding, preparing project applications, project completion and administration, as well as implementation.

Through cooperation with Danish and foreign partners, for example municipalities, regions, universities, producers, competence centres, EU bodies etc., MedCom has achieved great technical and professional insight into and experience of IT in healthcare, and has the status of a neutral mid-player who gathers the parties within the field.

Against the background of increased globalisation, it will be beneficial to MedCom’s national projects to gain an international aspect in order to take advantage of international experience as well as contribute to international developments with-in IT in healthcare. This will strengthen Denmark’s position on the international arena and position Danish IT in healthcare. The international angling can raise the level of knowledge in relation to projects, nationally and internationally.

About the project

The project line develops the international aspect in MedCom’s other project lines. The objective is therefore to initiate cooperation with all of MedCom’s sub-project managers in order to:

- Support and help sub-elements of the project with an international angle.
- Discuss with staff.

Against the background of concrete needs identified in the project line, the objectives are therefore to:

- Find partners in relevant projects, some Danish – some foreign.
- Identify funding sources.
- Contribute with and participate in the development of international and welfare technology initiatives, together with a wide range of local and national parties.

Specifically, the project wants to define projects based on topic 3 in the next application round for the ICT

CIP programme (ICT Policy Support Programme) in the EU: ICT for health, aging and inclusion, and:

- Together with the Chronic condition support project line, bid in on objective 3.5: Large scale development and telehealth services for chronic condition management.
- Form a consortium together with other Danish and foreign partners.
- Identify other project lines (for example municipal projects) as well Danish and other foreign partners with reference to applications relating to other objectives in the same area.

At the same time as the above, the project wants to:

- Hold workshops with reference to utilising experiences and results from current and completed projects with regard to spreading welfare technology.
- Implement existing projects.

Your tasks

If you are interested in giving your project an international aspect via participation in an EU project relevant to your project line, you must:

- Enter into a binding cooperation where your project organisation contributes to an international project which MedCom is running.

- Strengthen Danish IT in healthcare, among other things, by participating in eHealth Week 2012 and other international conferences, as well as other marketing measures.

When international conferences are held in Denmark, MedCom is glad to make its expertise and network within IT in healthcare available.

Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Meetings with project managers at MedCom								
2. Information material								
3. Project application (identification of partners)								
4. Evaluation								
5. Project completion		DREAM-ING		ICT 4 Health				WTR uAAL

8.1 Standards, tests and certification

Background

Common documentation of standards, accompanied by supplier tests and certification, is a prerequisite for nationwide, standardised, professional and technical implementation of electronic communication.

MedCom will give technical assistance and support the development of new standards in the individual project lines, as well as ongoing maintenance of old standards, for example in the case of changes in agreements.

When new systems are introduced, they must be tested, supported by test protocols.

About the project

To increase quality in testing and approval, a testing and certification system is being introduced: Antilope (Connectathon – Gazelle).

Change management: Change management of standards is also important. The complexity of change management rises with the number of standards.

Converters: Consolidation and updating of testing tools, including converters. A review of the software and troubleshooting are needed. The error descriptions that the con-

verter provides to facilitate use by system providers must be optimised.

The converter is integrated with the VANS-based Danish health data network to be able to test the combined solution from the system provider live.

MedCom prepares test protocols when the need arises in testing and certification.

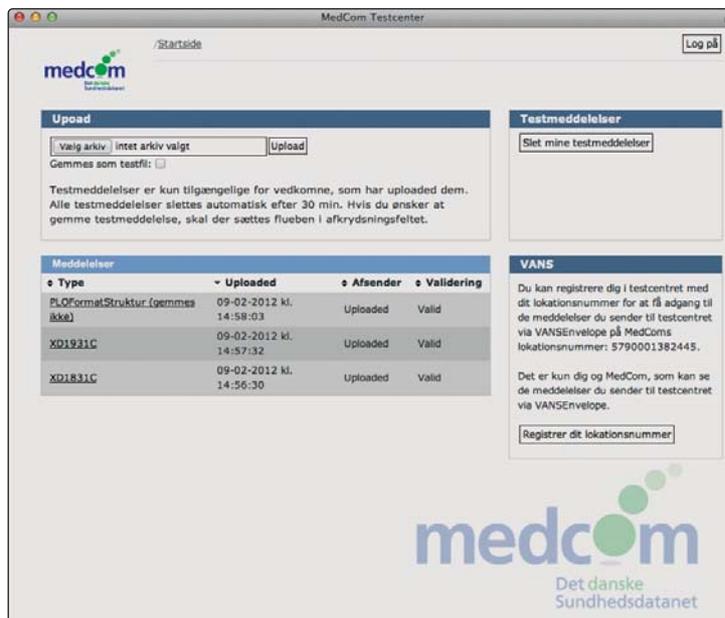
Your tasks

- Antilope:**
- Is accessible from a website.
 - MedCom sets up access for each system.
 - System providers must retrieve test examples and replace them.
 - On this basis, MedCom can test and approve the systems.

Change management: Gives access to technical documents and text. Here, providers can follow changes over time.

Converters: Used to test own messages in the event of errors or when programming new messages.

- Collaboration partners:**
- MedCom project managers, internal and external.
 - System providers.
 - Technicians.



Schedule – key milestones 2012–2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Analyses								
2. Development								
3. Testing								
4. Documentation								
5. Dissemination								

8.2 Operation of the Danish health data network, SDN, and the video hub, VDX

Background

Operation of SDN/VDX:
Continued operation of the Danish health data network (SDN) and the Video hub (VDX), including necessary further development and adaptation, including handling requirements from the Danish Data Protection Agency, is a prerequisite for exchanging data in healthcare and for tele-medical projects in general.

Common phone book:
Produced to make it easier to find video addresses of collaboration partners. Will make it possible to select an address instead of typing it in via a remote control.

IPv6:
SDN and VDX will be developed to support IPv6 to ensure future use. IPv6 facilitates end-to-end security and increased mobility.

Security:
The swap-over to IPv6 challenges the present security models of parties in the healthcare sector. Therefore, suggestions must be made for migration strategies, which take account of current security challenges.

Integration with other platforms:
There is a widespread wish to be able to use video conferencing on mobile platforms and to reuse existing video conference solutions.

About the project

Operation of SDN/VDX:
Ensure continued operation of SDN/VDX and development of the agreement system to support IPv6 and the latest browser versions. VDX is extended to support streaming and to be able to deliver real-time statistics.

Common phone book:
Option of sharing phone books via LDAP and TMS integration. Processes are described and common phone books are made available on VDX via IPGW and the web with search functionality.

IPv6:
SDN and VDX equipment enables in relation to IPv6 to support dual stack functionality. Migration projects are launched in collaboration with affected organisations.

Security:
Security models for SDN on IPv6 are investigated and implementation suggestions are made as well as security guidelines. Security guidelines for medical practices are updated.

Integration with other platforms:
A platform is developed which supports mobile video conferencing on both IOS and Android-based end points. Integration with other platforms is investigated and supported. For now, with Lync and HealthCare (Cisco and Videra).

Your tasks

Operation of SDN/VDX:
Operating agreements with Net-Design continue. VDX is included as a national service on SDN and financed by SDN user payments. Basis financing must be able to cover required further development and adaptation.

Common phone book:
Regions and municipalities share address books on a common platform.

IPv6:
In collaboration with NetDesign, upgrades of SDN/VDX are launched. Infrastructure group and video technology group identify IPv6 projects.

Security:
Contact to selected organisations which have already implemented IPv6 to involve their security considerations in the work. Use of external resources for selected parts of security guidelines.

Integration with other platforms:
Collaboration with regions and municipalities to support projects that are ongoing. Listen to and support diverse projects.

Schedule – key milestones 2012-2013	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Operation of SDN/VDX	Agreement system IPv6, IEv9.0	Status page Streaming	Agreement system		Agreement system		Agreement system	
2. Common phone book	IPGW	LDAP WEB searches						
3. IPv6	SDX/VDX ready	Pilots identified	Projects in 5 org.		IPv6 on the agenda in 25% of connected org.	50%	75%	IPv6 linchpin identified in 100% of connected org.
4. Security	Medical practice guidelines updated	Additional guidelines Migration suggestions						
5. Integration with other platforms	Mobile platform	HealthCare	Lync					

8.3 Technological future-proofing of MedCom communication

Background

The VANS-based infrastructure behind MedCom’s message communication was established at the start of the 90s and is used on a large scale by all parties in the healthcare sector. The infrastructure is then constantly expanded with new measures, for example OIO-XML standards, the Danish health data network (SDN), video hub, different web hotels etc. Today, the combined network therefore consists of a range of technologically different and partly incoherent parts.

Therefore, over a number of years, there have been requests, including from Digital Sundhed (digital health) and National Board of e-Health (NSI), to change to new technology – often with suggestions of using service-oriented architecture (SOA).

In autumn 2011, MedCom’s contact persons in the Capital Region of Denmark suggested that in MedCom8 work is started on technological future-proofing of MedCom communication.

About the project

The aim of the project is to analyse and describe the combined existing MedCom infrastructure, including message standards, the VANS network, SDN, referrals and other forms of “hotel” solutions, logistics problems etc.

Against the background of the description, a proposal will be developed and a business case for combined future-proofing of MedCom’s infrastructure. Furthermore, a plan for gradual and needs-based swap-over to new technology within the framework of the NSI’s tasks in relation to standards and reference architecture in the area of IT in healthcare.

If a decision is made to modernise the MedCom infrastructure, this will be included in the project plan for MedCom9.

The project has the following deliverables:

- Terms of reference and organisation.
- Proposal for technological future proofing.
- Decision about future technology.
- Technical and organisational clarification.
- MedCom9 project plan.

Our tasks

MedCom and NSI:

- Prepare terms of reference and organisation of the process.
- Prepare an actual plan of action for technological future proofing of MedCom communication and include it in the MedCom9 project plan.

MedCom8 coordination group etc.:

Analyses and describes the combined present MedCom infrastructure.

MedCom’s steering committee and NSI:

Make a decision based on the prepared business case about whether and to what extent the MedCom infrastructure will be future-proofed.

Schedule – key milestones 2012-2013

	1/12	2/12	3/12	4/12	1/13	2/13	3/13	4/13
1. Terms of reference and organisation (MedCom & NSI)								
2. Proposal for technological future proofing (MedCom8 group)								
3. Decision about future technology (MedCom equipment)								
4. Technical and organisational clarification (MedCom & NSI)								
5. MedCom9 project plan								

MedCom and the future

MedCom was launched in 1994, and its objective is still the same; to develop and spread electronic communication between all players in the healthcare sector, including citizens. Much has been achieved, but there is always room for improvement. A large number of MedCom projects must be concluded in this project period and some of them against the background of regional, municipal and national agreements.

The government and Danish Regions entered an agreement in June 2010 about IT in healthcare, which means that all relevant communication between healthcare sector parties must be done electronically. In concrete terms, the agreement means that all MedCom's standards will be fully disseminated in all hospitals by the end of 2012.

The ambitions of the regional hospital service are matched by corresponding objectives in municipal digitalisation strategy, healthcare agreements and general practitioners' consensus.

The regions also wish to focus on their work with electronic communication, which supports effective work planning – internally in hospitals as well as with regard to cooperation between treatment providers in different sectors. One very important area of development is telemedicine, including video conferencing and interpreting. By the end of 2012, these solutions will be disseminated to the relevant hospital departments.

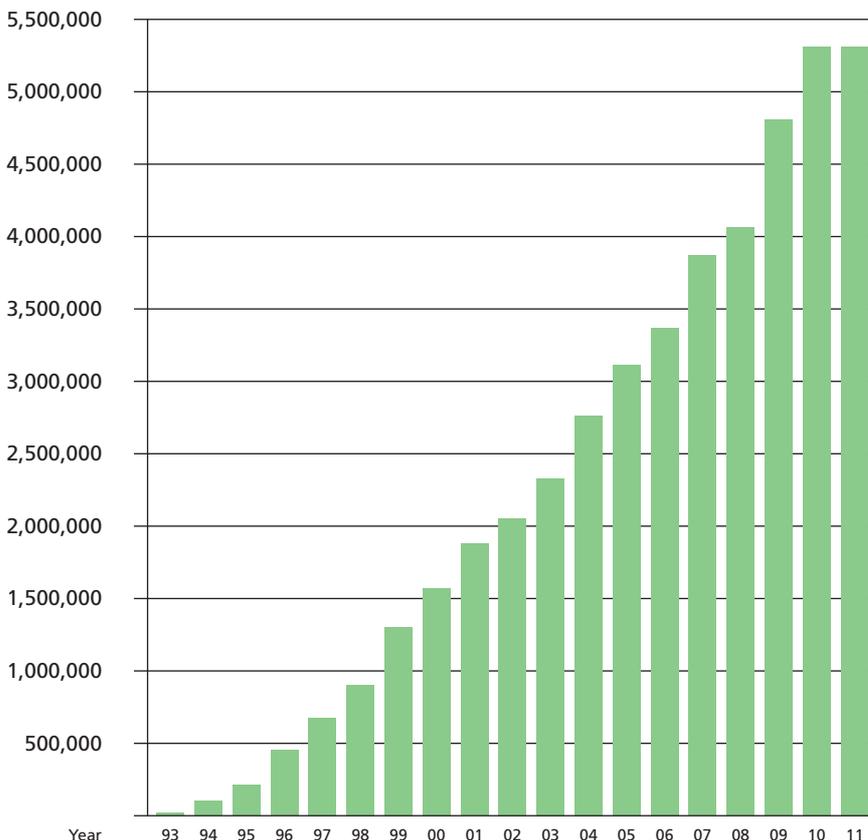
In general, telemedical options will be optimised on an ongoing basis. In the hospital service, as well as in municipalities, where

home monitoring, tele-psychiatry and ulcer assessment are current projects, among other things.

In MedCom8, the project Common Chronic Condition Data will be tested in several places in the country and will then be ready for national dissemination as IT support for Denmark's National Board of Health's development programmes for chronic diseases. Relevant data is captured in the national data sources, which already exist in the healthcare sector, and are supplemented with monitoring data from citizens' own homes, for example. It is MedCom's task to ensure that all parties involved, including citizens themselves, get access to the same data via the electronic journal systems and The Danish eHealth Portal.

National Board of e-Health (NSI) defines cross-sectoral standards and reference architecture. MedCom plays three roles to support these tasks. It is about preparing new standards, testing standards in pilot projects, and, finally, the important role as the owner of standards, which means supervision and maintenance.

The number of messages based on MedCom standards has developed almost explosively since 1994 – see figure. A development which has been achieved in close collaboration with parties in the healthcare sector and their IT providers. A collaboration which is also essential for MedCom's work to disseminate new communication solutions, for example the Common Medical Card to medical practices, the National Health Record and various telemedical solutions.



The columns in the figure show the total number of messages on average per month.

Cooperation on eHealth in the healthcare sector

The four organisations have mutually complementary activities relating to the dissemination of eHealth in the healthcare sector:



NSI

National Board of e-Health has two main tasks. First of all, to ensure national coordination of IT support for the healthcare sector, including cooperation with regions and municipalities. Secondly, to operate and develop IT systems under the Danish Ministry of Health.



regionernes
sundheds-it

RSI

The Regional eHealth organisation provides the framework for a binding and effective cooperation on IT in the healthcare sector.



The Danish eHealth Portal

The Danish eHealth Portal's task is to establish, operate and further develop a healthcare portal, which constitutes an information and communication platform for interplay between citizens and healthcare professionals.



MedCom

MedCom's main tasks are to develop messaging standards for the primary sector, with a subsequent national launch.

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