**Appendix**

* 1. Denmark

SELFIE model

Service delivery

* 1993: Free hospital choice
- Green: clear national policy on it
* 1995: Copenhagen Hospital Corporation
- Yellow: Municipal level
* 2002: Extended free hospital choice
- Green: legislation
* 2017: correlation between different levels
- Green: Legislative
* 2018: Cohesive patient care
- Yellow: a project
* 2018: holistic patient care
- Yellow: cases

Workforce

* 2006: home care health nurses
- Green: legislation
* 2015: coordinative doctor
- Yellow: pilot project
* 2017: Coordinative doctor
- Green: formal agreement on coordinative doctor

Technologies and medical products

* 1994: Medcom
- Green: Owned by Ministry of Health, Danish Regions and Local government Denmark
* 1996: Plan for Electronic Health Records
- Yellow: An action plan
* 1999: Strategy for nationwide health records

- Yellow: A strategy

* 2003: Health data network
- Yellow: a strategy
* 2004: health record keeping
- Green: municipal/ regional level
* 2010: Regions Health IT
- Yellow: regionally cooperation
2010: Shared Medicin card
- Green: agreement between Regions and Danish Organisation for General Practitioners
* 2015: Fælles Sprog III
- Yellow: joint municipal method
* 2016: Digitization association
- Yellow: municipal initiatives
* 2018: Strategy for digital health
- Yellow: Strategy
* 2019: MyHealth app
- Green: Administered by Health Ministry, regions and municipalities
* 2019: AI projects
- Yellow: projects
* 2019: Taskforce for digital psychiatry
- Yellow: initiative

Leadership and governance

* **2005: Health coordination committee**
- Green: Part of new health law
* **2007: Structural reform**
- Green: legislative
* 2008: national audit of integrated care
- Green: legislative
* 2014: Change in health agreements
- Green: formal agreement
* 2015: organizational change
- Green: Formal organizational change
* 2016: National quality programme
- Green: national formal programme
* 2017: Quality clusters
- Green: formal agreement
* **2018: Cohesion Reform**
- Green: reform
* 2018: Change in health agreements
- Yellow: guidance
* 2021: Exchange of information
- Green: legislative
* **2021: Cluster cooperation**
- Green: legislative
* 2022 Health reform package
- Green: reform

Finance

* 2002: Right for self-employed to deduct health treatments
- Green: legislative
* 2007: Municipal co-financing of hospital treatments
- Green
* 2018: ”Proximity’ funding incentives in state funding to regions based on indicators of integrated care
- Green

Information and research

* 2005: Disease Management Programmes
- Yellow: recommendation
* 2013: Analytical work on coherence
- Green: Requirement

|  |  |
| --- | --- |
| **Reforms or policy initiatives** | **Models of governance & care organizations** |
| **År** | ***Reforms or policy initiatives*** | **År** | ***Models of governance & care organizations*** |
| 1993 | **Free hospital choice (Frit sygehusvalg)**1. Patients who need treatment at basic level are free to choose between the hospitals providing treatment at this level.
2. Patients who, after medical assessment, have been referred for treatment at national and county level are free to choose between national and county hospitals with the given function.
3. New Public Management (NPM); efforts to use market-like mechanisms in the health care system in terms of free hospital choice, competition between providers, outsourcing, etc.

<https://www.retsinformation.dk/eli/retsinfo/1993/15001> | 1993 |  |
| 1994 |  | 1994 | **MedCom** 1. A non-profit organisation established and owned by the Ministry of Health, Danish Regions and Local Goverment Denmark.
2. Facilitates and develops digital solutions across the Danish health care sector.

<https://www.medcom.dk/media/1167/medcom-20years.pdf>  |
| 1995 | **Copenhagen Hospital Corporation (Hovedstadens sygehusfællesskab)**1. Community on division of labour between the hospitals in Frederiksberg and Copenhagen
2. Multidisciplinary quality councils across hospitals were established
3. *Medical center*: Main goal to achieve a coordinated interdisciplinary community on the individual patient pathway that provides continuity and coherence for patients

<https://rigsrevisionen.dk/revisionssager-arkiv/2000/feb/beretning-om-hs-oekonomi-og-aktiviteter-1995-1998> (kilde er år 2000)<https://www.frederiksberghospital.dk/om-hospitalet/om-frederiksberg-hospital/Documents/Frederiksberg_Hospital_100_aar_ny.pdf> | 1995 |  |
| 1996 |  | 1996 | **Action Plan for Electronic Health Records (Handlingsplan for Elektroniske Patientjournaler).**1. The Ministry of Health presents an action plan for electronic health records. Of these, several counties acquire electronic health records in the following years.

Kilde: Handlingsplan for elektroniske patientjournaler : HEP-projektet : Strategirapport, 23. august 1996  |
| 1999 |  | 1999 | **National strategy for a nationwide health records system in the health care system (National strategi for landsdækkende patientjournalsystem i sygehusvæsenet).** 1. The Danish Health and Medicines Authority publishes a national strategy for IT in the hospital system 2000-2002, which became the basic structure for the electronic health records.

<https://www.yumpu.com/no/document/read/20468810/national-strategi-for-it-i-sygehusvaesenet-2000-2002-dagens-medicin>  |
| 2002 | **Legislative proposal: The right of self-employed to deduct health treatments (Lovforslag: Fradragsret for selvstændigt erhvervsdrivendes sundhedsbehandlinger)**1. Co-payment to address fragmented health care.
2. The legislation opens up for strong growth of health insurance since 2002

<https://www.retsinformation.dk/eli/ft/200212L00077>**Extended free hospital choice (Udvidet frit sygehusvalg)**(Section 82a of the Danish Health Act on extended free choice of hospital for diagnostic examinations)1. The collaboration with private hospitals includes local agreements such as tender agreements, partnership agreements and operating contracts as well as central agreements on the right to rapid assessment (30 days) and agreements on the extended free choice of hospital.

<https://www.retsinformation.dk/eli/lta/2019/903#id9085bc43-a0ee-4f55-92b3-9aa686972c1c> | 2002 |  |
| 2003 |  | 2003 | **Health data network (Sundhedsdatanet)**1. A secured network put into operation by MedCom for data communication across public and private actors in the health care sector.

<http://begrebsbasen.sst.dk/IT-strategi_Screen%20PDF.pdf>  |
| 2004 |  | 2004 | **Health record keeping systems in general practice (Journalføring systemer for almen praksis)**1. The Danish Organisation of General Practitioners and the counties agree that general practice must use computer and record keeping systems in order to share clinical notes, etc.

<https://www.medcom.dk/media/1354/elektronisk-kommunikation-til-gavn-for-kvaliteten.pdf>  |
| 2005 | **Health coordination committee (Sundhedskoordinationsudvalg)**1. Part of the new health law: The Regional Council, in cooperation with the municipal councils in the region, establishes a health coordination committee on regional and municipal efforts in the field of health and on efforts to ensure coherence between the health sector and the adjacent sectors.

<https://www.retsinformation.dk/eli/lta/2005/546> | 2005 | **Disease Management Programmes (Forløbsprogrammer)** 1. The Danish Health and Medicines Authority recommends the use of Disease Management Programmes for chronic diseases from 2005. This happens in relation to the municipal reform that strengthened the opportunities for a coherent effort towards patients with chronic diseases.
2. In 2008, the Danish Health and Medicines Authority created a generic model for such programmes. These are taken up by the five regions, which have since conducted Disease Management Programmes for various chronic diseases such as COPD, diabetes and dementia.

<https://sundhedsstyrelsen.dk/~/media/B687391740314F2DBC0B5690D53A7031.ashx> <https://www.sst.dk/~/media/5C35B9DEA91B4E0A91458076F1994019.ashx>  |
| 2006 | **11-12-2006: Guidance for home health nurses focusing on integrated patient care. (Vejledning til hjemmesygepleje fokuserer på sammenhængende patientforløb)**1. Intended as a contribution to creating continuity, quality and coherence in patient care, cf. VEJ no. 102

<https://www.retsinformation.dk/eli/mt/2006/102> | 2006 |  |
| 2007 | **01-01-2007: Major ‘Structural Reform’ becomes effective (Strukturreformen / Kommunalreformen træder i kraft).** 1. The counties will be replaced by five regions, which will primarily run the Danish hospitals.
2. Funded by block grants from the state paid through a state activity-specific grant: Municipal contribution to the financing of the health care system. Municipal co-financing invites the municipalities to have a greater role in the health care system.
3. Centralized control of health care.
4. In order to improve coordination between the regions and the municipality, a mandatory coordination board is formed with representatives from the region and the municipality
5. Statutory health agreements made in collaboration between regions and municipalities on the cooperation between treatment, prevention and care.

<https://sum.dk/Media/7/A/Strukturaftale.pdf> | 2007 |  |
| 2008 |  | 2008 | **The national audit office commences an investigation on integrated patient care (Rigsrevisionen iværksætter undersøgelse om sammenhængende patientforløb)**1. Independent institution under the Danish Parliament.
2. Report in 2009: The report is about the work of the Ministry of Health and Prevention and the regions to support coherent patient pathways across 3 sectors: general practice, hospital and municipality.

<https://rigsrevisionen.dk/revisionssager-arkiv/2009/feb/beretning-om-sammenhaengende-patientforloeb> |
| 2010 |  | 2010 | **Regions Health IT (Regionernes sundheds-IT (RSI))*** Regionally intensified cooperation in the field of digitalisation with the implementation of 50 joint projects aimed at strengthening the regions' common direction, as well as strategy and efforts in relation to digitalisation, data, technologies and innovation in the field of health
* RSI runs the regions' joint projects, system development and sets a common direction for the IT architecture and for security

<https://www.regioner.dk/RSI>**Shared Medicine Card (Fælles Medicinkort)** * Negotiation deal between the Regions' Wage and Tariff Board and the Danish Organisation of General Practitioners that general practitioners are obliged to use the Shared Medicine Cards (giving health professionals and citizens access to the history of the citizen's medicines and vaccinations).

<http://medcom.dk/media/4479/plo-overenskomst.pdf>  |
| 2013 |  | 2013 | **Analytical work on coherence between sectors (Analysearbejde om sammenhæng mellem sektorer)*** In the 2013 Economic Agreement; The Danish Government, Danish Regions and the Local Government Denmark - initiates analytical work on the coherence between sectors such as 'evaluation of the structural reform', 'digging into structures and incentives in the health service' and 'the committee on potentials for improved municipal prevention'
* These will form the basis for initiatives that can strengthen coherent patient care

<https://www.regioner.dk/media/3182/oea-2013.pdf>  |
| 2014 | **Change in health agreements (Ændring af Sundhedsaftaler)**1. The number of health agreements decreases from being one in each municipality to one in each region. The purpose of this is to strengthen health agreements and solve problems across sectors for coherent patient pathways.
2. Greater funding in the focus area 'patient centered health services'

<https://www.regioner.dk/media/3183/oea-2014.pdf>  | 2014 |  |
| 2015 | **Organisational change (Danish Patient Safety Authority and the Danish Medicine Agency) (Organisationsændring (Styrelsen for Patientsikkerhed og Lægemiddelstyrelsen)**1. The Danish Health Authority is getting slimmer, more focused
2. Establishment of the Danish Health Data Authority - strengthens coordination of digitization.

<https://laegemiddelstyrelsen.dk/da/nyheder/2015/ny-organisation-i-sundheds-og-aeldreministeriet/>  | 2015 | **2015-2016, ‘coordinative doctor’ (A specific general practitioner has the responsibility for coordinating a patient’s care), 44 pilot projects of this in the 5 regions (Patientansvarlig læge (PAL), 44 pilotprojekter med patientansvarlig læge i de 5 regioner)*** In collaboration with the Danish Association of Chief Physicians (FAS), Junior Doctors, the Danish Cancer Society and Danish Patients, the regions have initiated a total of 44 pilot projects in Denmark, which test different models and gain important learnings.
* The nature of the pilot projects has varied considerably in terms of complexity and scope.
* The pilot projects will run until the end of 2016, after which they will be evaluated.

<https://www.regioner.dk/media/3999/uddybende-forstaaelse-til-aftale-om-nationale-model-for-patientansvarlig-laege.pdf>**Fælles Sprog III*** the Local Government Denmark presents
* The ‘Joint Municipal Action Plan’ 2016-2020 with Fælles Sprog III / (Common Language III) as part of this. A joint municipal method and standard for documentation of municipal tasks in the health and elderly area
* Contributes to better coherence and more data recycling in the municipalities' IT-based care records through the implementation of uniform concepts, classifications and customized workflows.

<https://www.kl.dk/media/11662/handlingsplan-lokal-og-digital-et-sammenhaengende-danmark.pdf>  |
| 2016 | **The national quality programme (Det nationale kvalitetsprogram)**Together with the government and the Local Government Denmark , Danish Regions has launched a national quality programme. The quality programme consists of three main elements (1) 8 national health care goals, (2) Establishment of learning and quality teams in selected areas and (3) A national management programme1. *Strategy and Performance measurement, 8 national targets (Goal 1: Better coherent patient care)*
* The national targets will ensure that all actors in the healthcare system – hospitals, municipalities and general practice – work in a clear and common direction towards higher quality and at the same time makes it easier to see where improvements are needed.
* An attempt at de-bureaucratisation
* For each of the national targets there are a number of indicators. They show the progress of each objective. (including up-to-date medical information by general practitioners)
1. *Establishment of learning and quality teams in selected areas*
* Learning and quality teams are established across the regions and municipalities. The teams consist of a network of relevant departments/units and an expert group with leading clinicians, experts in change, data, etc.

<https://sum.dk/temaer/8-nationale-maal-for-sundhedsvaesenet> | 2016 | **Digitization association Zealand (Digitaliseringsforening Sjælland)** * 11 municipalities in Zealand are joining forces under pressure from the Local Government Denmark and the state to link the municipalities closer together with one common IT solution.

<https://digitaliseringsforeningen.dk/?page_id=46>  |
| 2017 | **‘Coordinative doctor’ (Patientansvarlig læge)**1. As part of ‘coordinative doctor’ programme: The Ministry of Health and Danish Regions have, in collaboration with several professional organizations and patient associations, entered into an agreement on a national model for ‘coordinative doctors’.
* Agreement that all relevant patients should have a patient responsible doctor by the end of 2019.

<https://sum.dk/nyheder/2016/november/aftale-om-patientansvarlig-laege-paa-plads>**Quality clusters, agreement 2017 (Kvalitetsklynger, overenskomst 2017)**1. The 2017 agreement included a new quality model in which GPs join forces in so-called clusters and work with data-driven quality.
2. The implementation of the quality model began on 1 January 2018, and over 50% of GPs are now in a cluster.

<https://www.regioner.dk/sundhed/praksissektoren><https://www.vive.dk/media/pure/17861/6961414>**Existing plans for specialisations commence (Gældende specialeplan træder i kraft)**1. The basic premise in the plans for specialisations is a correlation between healthcare experience, quality and volume at both individual, unit and hospital level.
2. Meet the need for development and coherence in the functions of the hospital system.

<https://www.retsinformation.dk/eli/retsinfo/2014/9053> | 2017 |  |
| 2018 | **Cohesion Reform (Sammenhængsreformen)**1. Holistic efforts as part of 6 objectives.
2. Proximity funding, the financial agreement supports a strengthened coherence in the health care system

<https://www.regeringen.dk/media/5630/sammenhaengsreformen-mere-frihed-tillid-og-tryghed_web.pdf>**Strategy for digital health 2018-2022 (Strategi for digital sundhed 2018-2022)**1. Seeks to provide a unified patient overview and make it possible to share relevant information digitally.
2. Development of clinical IT systems and municipalities implement new structured care records (Common Language III)
3. *Health for you - Regions' collaboration on digitization*

<https://sundhedsdatastyrelsen.dk/da/strategier-og-projekter/strategi-for-digital-sundhed>**Change in health agreements (Ændring af Sundhedsaftaler (2018))**1. The Danish Health Authority sends out new guidance to health agreements that focus on clear agreements for cooperation.

<https://www.sst.dk/da/Nyheder/2018/Sundhedsstyrelsen-sender-ny-vejledning-om-sundhedsaftaler-i-hoering>  | 2018 | **Cohesive patient care, Region Zealand (Sammenhængende Patientforløb, Region Sjælland)** * Region Zealand commenced the project ‘Under The Bridge to Better Health’ in collaboration with TrygFonden - creates greater coherence and better flow in the overall efforts and treatments around socially vulnerable patients across sectors and professional boundaries.

[https://www.regionsjaelland.dk/Kampagner/broen-til-bedre-sundhed/Materialer/Documents/Rapporter%20fra%20VIVE,%20september%202018/Rapport%20-%20Sammenh%C3%A6ngende%20patientforl%C3%B8b.pdf](https://www.regionsjaelland.dk/Kampagner/broen-til-bedre-sundhed/Materialer/Documents/Rapporter%20fra%20VIVE%2C%20september%202018/Rapport%20-%20Sammenh%C3%A6ngende%20patientforl%C3%B8b.pdf) **6 cases for inspiration of the further work with holistic patient care (6 cases til inspiration for det videre arbejde med Helhedsorienterede Patientforløb)*** An inspiration catalogue resulting from the project ‘Holistic Patient care’, which is one of 33 health efforts under the Citizens' Health Service.
* The goal of the effort is for patients to experience safe and coherent transitions with a focus on "seamless" transitions between departments and sectors.

<https://www.regioner.dk/sundhed/kvalitet-og-styring/borgernes-sundhedsvaesen> |
| 2019 |  | 2019 | **Establishment of MyHealth app (Oprettelse af MinSundhed app)*** Displays, among other things, medical record data, laboratory results and health services in the proximity area

<https://www.regionh.dk/selvbetjening/Sider/min-sundhedsplatform.aspx>**13 regional AI-signature projects (13 regionale AI-signaturprojekte)r*** In connection with the municipalities and regions' financial agreement for 2020, the Government, the Local Government Denmark and the Danish Regions decided to initiate 15 signature projects for testing artificial intelligence in municipalities and regions
* In total, there are 13 regional AI signature projects that target a wide range of topics in the healthcare field: testing artificial intelligence-based solutions to various health-related challenges.

<https://www.regioner.dk/media/15106/13-signaturprojekter-2021.pdf>**Taskforce for digital psychiatry (Taskforce for digital psykiatri)*** A cross-regional initiative to create value for people with mental disorders.

<https://www.regioner.dk/sundhed/sundhedsinnovation-og-forskning/taskforce-for-digital-psykiatri> |
| 2021 | **Amendment which enables the exchange of information (amendment no. 1647) (Lovændring der muliggør udveksling af oplysninger (lovbekendtgørelse nr. 1647))**1. Exchange of certain information between municipalities and the health sector to ensure better coherent treatment and care for citizens (**'Section 13.')**

<https://www.retsinformation.dk/eli/lta/2021/2619>**Cluster cooperation (Klyngesamarbejde)** 1. Health clusters are established around each acute hospital, there is a collaboration between the region, municipalities and general practice on efforts to ensure the connection between the health sector and the adjacent sectors.

<https://www.ft.dk/ripdf/samling/20211/lovforslag/l191/20211_l191_som_vedtaget.pdf>  | 2021 |  |
| 2022 | **2022 Health Reform Package (Nye Sundhedsreform 2022)** * A greater focus on the local healthcare services (up to 25 new local hospitals in 2023-2028), strengthen the quality of treatment for chronically ill patients, strengthen the municipal emergency functions, development of municipal performance measures, plan for more doctors and better medical coverage in areas with a shortage of doctors, for example through the introduction of compulsory practice, etc.
* The goal is to reduce the pressure facing the hospitals as a result of an aging population and a reduced hospital workforce.
* DKK 4 billion has been set aside for the establishment of the local hospitals. To lift the effort in the local healthcare system and make the healthcare system more robust, DKK 1.3 billion has been set aside in the period 2022-2025 and thereafter DKK 387 million per year.

[https://sum.dk/Media/637831953766403005/Regeringens%20sundhedsudspil%202022%20(tilg%c3%a6ngelig%20PDF).pdf](https://sum.dk/Media/637831953766403005/Regeringens%20sundhedsudspil%202022%20%28tilg%C3%A6ngelig%20PDF%29.pdf)  | 2022 |  |