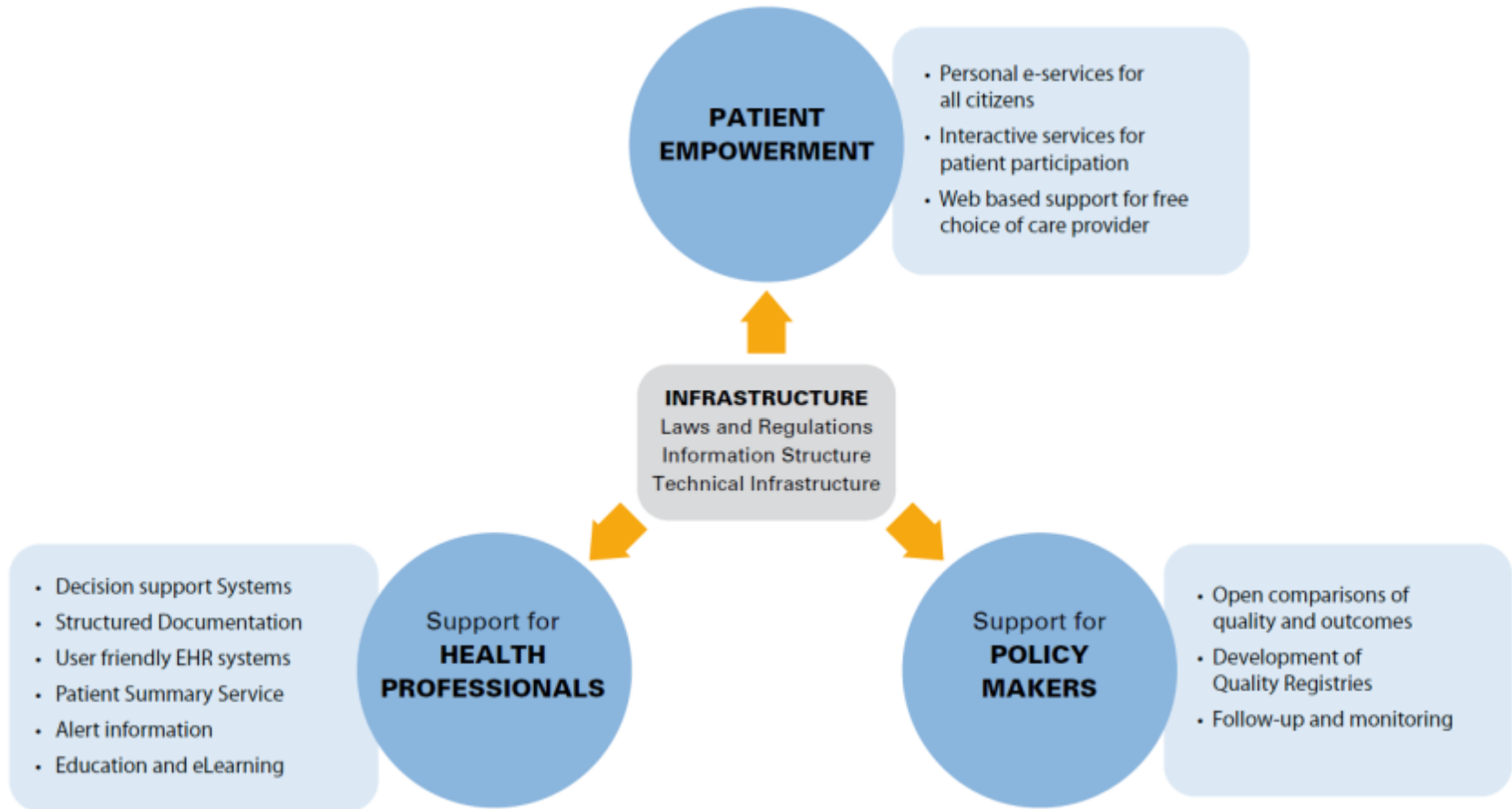


# National eHealth strategy and how it will be implemented. Sweden

Lars Jerlvall

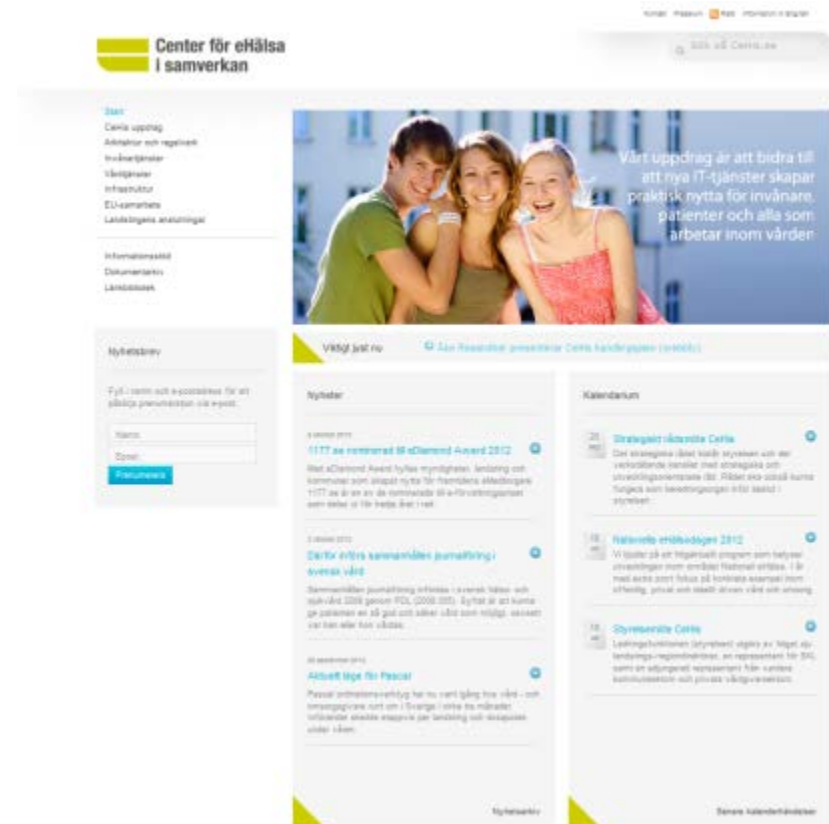


# National strategy for eHealth in healthcare



# CeHis role and assignment

- ❑ Coordinates eHealth collaboration between the county councils and the regional councils
- ❑ Regulates eHealth work in agreements between the Swedish Association of Local Authorities and Regions (SALAR) and each county council/regional council
- ❑ Governed by representatives from county councils and regional councils, SALAR, and municipal and private healthcare providers

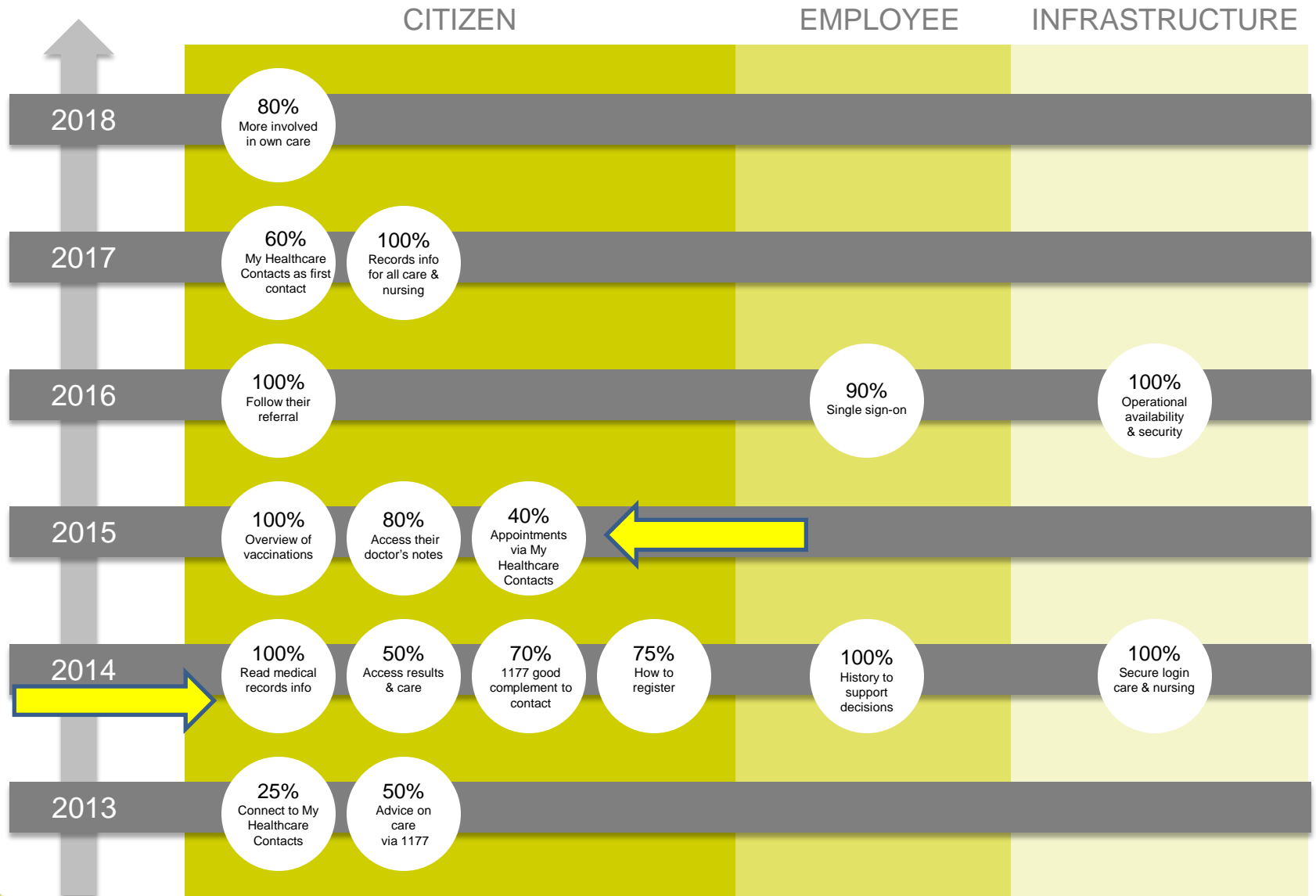


www.cehis.se

## 2018 Goals

- Individuals**
  - Can access all information about themselves
  - Can play an active role in their care and nursing
  
- Employees**
  - Have the right tools
  - Information available
  
- Decision-makers**
  - Access to fact-based data





## Development projects and management of objects



### Citizen services

- Access to quality-assured information
- Making contact easier
- Self-service option
- Could become the front line in care and nursing
- Interactive services using several channels (Internet, telephone and mobile)

*Medical records online via internet*

*1177.se, 1177 phone health care advice*

*My Healthcare Contacts*

*National helpline*

*UMO.se*



 A screenshot of the 1177.se website. The header shows "Du ser information från 1177 i Stockholms Läns Landsting" and "1177 | Stockholms läns landsting". There is a search bar with the text "Sök sjukdom, behandling, mottagning" and a "SÖK" button. Below the search bar are navigation tabs: "STARTSIDA", "FAKTA OCH RÅD", "REGLER OCH RÄTTIGHETER", "TEMASIDOR", and "HITTA OCH JÄMFÖR VÅRD". The main content area features a large image of a doctor examining a child, with the text "1177: Råd om vård dygnet runt". To the right of the image are several quick links: "Jag vill hitta mottagning i Stockholms läns Vårdcentral", "Närskut", "Fler mottagningar", "Jag vill läsa om ett besök eller en sjukdom", "Jag vill ställa en anonym fråga till 1177.se", and "Kontakta vården och logga in via Minvårdstjänst". Below the main image is a section for "Få fler donerar organ" with a small image of a person. At the bottom, there are two featured articles: "Bor du i Stockholm?" and "Följ Vårdguidens gästbloggare". On the right side, there is a "Temasidor" section with a list of topics: "Gravid", "Barn och föräldrar", "Cancer", "Egenvård", "Kroppen", "Liv och hälsa", "Reseråd och vaccinationer", and "Tänder".

- 3.5 million/month
- 2,700 articles
- Newsletter, more than 100,000 subscribers
- Question function with 2,000 questions and answers
- Find and compare care
- E-services
- 15 animated films for children
- Film, animation, multimedia
- 3 million visits per month

# My Healthcare Contacts – current gateway to e-services



Meeting point on the Internet where citizens can get in touch with healthcare/nursing easily and securely by using personal e-services and to gain an overview of their health, care and nursing.

i.e booking, renewal of medication

My Healthcare Contacts enable county councils, publicly-funded care and nursing providers to make personal e-services available to patients and citizens in various ways. Both clinics run privately and by county councils.



## UMO service

- For young people 13-25 years old
- About sex, health and relationships
- Norm-critical and inclusive
- Available on Facebook
  - 400,000 visits per month
  - More than 9,000 questions answered
  - 50% of visits on mobiles



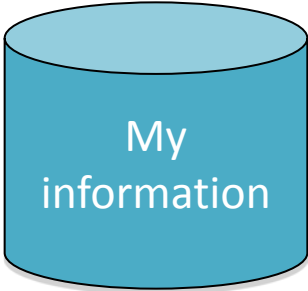
Ministry of Health and Social Affairs in Sweden

# The Personal Health Record Ecosystem

Wellness and health  
care information



Administration and  
privacy settings



Lifelong storage  
of information

Third-party applications



Apps and devices  
connected to the  
platform

## Healthcare services

- ❑ Access to effective IT support and tools for employees in care and nursing

*Child Health Data*

*EIRA*

*Electronic birth registration*

*Electronic doctor's sick notes*

*Electronic death certificates and  
cause of death certificates*

*E-referrals*

*Nitha event analysis*

*Infection tool*

*Pascal prescription tool*

*National Handbook for Paediatric Care*

*National Prescription Database NOD*

*National Patient Overview NPÖ*

*Swedish Information Database SIL*

*Standardised healthcare plans*

*Swedish Biobank Register SBR*

*Handbook for Healthcare*

- ❑ All county councils and regional councils are connected as producers and consumers
- ❑ A further 100 private healthcare providers are connected through care contracts with the county councils
- ❑ 60 municipalities, 10 private caregivers and the Swedish Dental Service are connected as consumers
- ❑ Goal: 95% municipalities will be connected as consumers 2013. Some as producers

The screenshot displays the NPÖ (National Patient Overview) web application interface. The browser address bar shows the URL: <http://10.250.40.72:57772/HealthShare - HealthShare - Microsoft Internet Explorer>. The page title is "npö Översikten" and the patient information is "19301101-6981 ASTRID SVENSSON Kvinna 78".

The interface includes a timeline from April 2008 to April 2010. Below the timeline, there are several sections:

- Diagnoser (Diagnoses):**

2008-04-10	DABETES MELLITUS TYP 2 MED EDD SPECIFISERANDE KOMPLIKATIONER	Kronisk
2008-04-10	ESSENTIELL HYPERTON	Kronisk
2007-04-09	DABETES MELLITUS TYP 2 MED EDD SPECIFISERANDE KOMPLIKATIONER	Kronisk
2007-04-09	ESSENTIELL HYPERTON	Kronisk
2009-01-12	KOLLAPSPÅFATT	Hjärtslagstopp
- Dokument (Documents):**

2009-01-12	Appt
2008-05-29	Öppenvårdstestning
2008-04-18	Öppenvårdstestning
2007-04-09	Öppenvårdstestning
- Läkemedel (Medications):**

2009-02-24	ALVOCIN	800	MG	200-4	0
2009-02-24	TRACOLAM	80	MG	128	0
2009-02-24	FRAGOM	2800	IE/M	131	0
2009-04-10	SIMASTATIN SANDICE	20	MG	1 TN	0
- Klinisk kemi (Clinical Chemistry):**
  - Mikrobiologi
  - EKG
  - Bilddiagnostik
  - Övrig undersökning

The bottom of the screenshot shows the Windows taskbar with the Start button and several open applications, including "npö - Översikten".

- ❑ A new online prescription tool, Pascal, has been introduced for around 185,000 'dose patients'. 50,000 users
- ❑ A National Prescription Database, NOD, has been created
- When prescribing medication, the provider can store and access information about a patient's entire medication use
  - when producing the prescription
  - **one copy**
- *Access to NOD is regulated through the Patient Data Act (PDL) and the Patient Security Act*

The screenshot displays the Pascal interface for a patient's medication management. At the top, there are tabs for 'Läkemedel' (Medication) and 'Handelsvaror' (Trade names). Below this, a patient search field shows 'Förnamn Efternamn' and the ID '19170211-6862'. There are buttons for 'Graviditet', 'Interaktion', 'Amning', and 'Biverkan'. A 'Ny ordination' (New prescription) button is visible. The main area shows a table of 'Aktuella' (Current) medications:

Medication	Strength	Form	Dose	Indication
Emconcor	5 mg	Filmdragerad tablett	1+0-1+0	Högt blodtryck
Imdur	30 mg	Depottablett	1+0-0+1	Hjärtsvikt
Nitromex	0,5 mg	Resoriblett, sublingual	1-2 tablett vid behov	Kärlkramp
Oxascand	15 mg	Tablett	1 tablett vid behov	Oro
Plendil	5 mg	Depottablett	1+0-1+0	Högt blodtryck
Trombyl	160 mg	Tablett	1+0-0+0	mot trombos

At the bottom, there is a 'Skriv ut DOS-recept (PDF)' button and some small text: 'DORIS anrop: 0,2s | SIL anrop: 0,7s'.

## Development projects and management of objects

- ❑ Enables municipalities, county councils and private healthcare providers to work together
- ❑ Information is transferred in a uniform, secure and cost-effective way



Infrastructure

*Identification service SITHS eID-card*  
*Service Catalogue HSA*  
*Customer service*  
*Communication network Sjunet*  
*National test*  
*Security Services – National Patient Data act.*  
*Service platform*  
*Video/distance meeting service*

### Summary

- Time period from 2013 to 2018 with goals set for the end of each year
- eHealth will continue to be developed in collaboration
- The political governance will be enhanced
- Individuals will be able to take part and influence their care through eHealth
- Concrete annual goals in the operational plan  
- decided by stakeholders
- eHealth – is in a healthy position, considerable development potential