

# The Norwegian Summary Care Record

## History of the Norwegian Summary Care Record

Parliamentary white papers in Norway have for many years pointed out the need for better cooperation and information sharing across all levels of the health service.

In 2008 it was determined that a National Summary Care Record (SCR) should be considered. In this period - the Summary Care Record was identified as a strategically important initiative to support [The Coordination Reform](#)<sup>i</sup>

The Directorate of Health then conducted a preliminary project in 2010 and in 2011 the national budget for 2012 earmarked 85 million kroner toward the establishment of a national SCR. There was a clear expectation in the parliament that a pilot solution should be launched in the fall of 2013, which necessitated a very tight production schedule. After a dialogue-driven procurement process, Accenture Norway was chosen as the main cooperative partner.

In 2012 legal authority was granted for the establishment of the SCR – resulting in a change to the Health Register Act. The development of the SCR started in September 2012.

In August 2013 a pilot was launched in the Mid-Norway region to make sure the SCR and methods of implementation worked. In 2014 a separate project for ensuring national adoption of the SCR was established. The main strategy was to have a regional implementation to ensure coordinated information and start up between health personnel in hospitals, emergency call-centers, out of duty medical response-offices and general practitioners. Due to the opt-out option for citizens, it was essential that citizens were informed and could opt-out before health personnel started using the SCR. The pilot and national adoption project took 3,5 years. In spring 2017 the SCR had been rolled out to all hospitals, all emergency call-centers, all out of duty medical response-offices and about 85 % of the general practitioners.

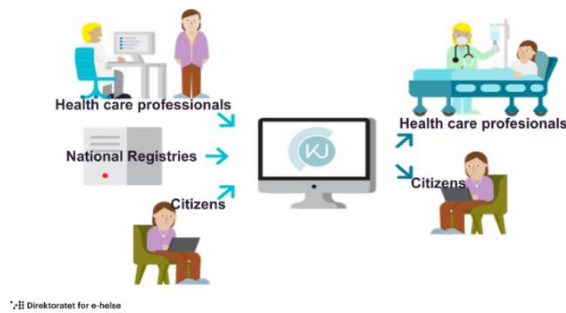
The extremely tight development timeline, with the launch of a pilot after only a year of development, made some architecture decisions necessary. For instance, it was decided to implement a solution with a portal to access the SCR within the user's EMR. Therefore the changes that the EMR-vendors had to implement, was strictly limited.

## The Norwegian Summary Care Record - principles and content

The SCR is an electronic service that contains important health information that both the citizen and health care personnel have access to, in different interfaces. It provides quick access to important health information about the citizens, regardless of where you receive treatment, especially in emergency situations when information about your health status is needed quickly.

The SCR is an [alert system](#) between different entities. It contains a *summary* and *core* of the patients medical information.

## Summary Care Record



The clinical content of the Summary Care Record is:

- **Medication list**
  - All medications that are dispensed by pharmacies, from both electronic and paper prescriptions, are retrieved automatically from the "Prescription Intermediary" system. (Norwegian: "Reseptformidleren"). The SCR includes a complete medication history for the last 3 years.
- **Contact information**
  - Family members (with telephone-numbers), address and name of the patient's general practitioner is retrieved from national registers.
- **Admission history**
  - admission to the specialist health service is retrieved automatically from the Norwegian Patient Registry (NPR). Diagnoses are not displayed.
- **Critical information / Alert information** (more information later in this document)
  - is entered by the attending physician.
- **Citizens** may register certain information
  - primary contact person
  - disease history (structured selections)
  - special needs for instance in connection with diminished sight, hearing or the need for a translator.
  - information about being an organ donor.

Most of the information in the Norwegian SCR is automatically extracted from national registers. Information that the patient himself want to include and alert information entered by the attending physician, is entered manually.

### Alert information in the Summary Care Record

In Norway alert information is called "Critical information". Critical information is information of special importance to health care personnel, information that may affect treatment decisions, especially in emergency situations.

Critical information is divided into six categories:

- Hypersensitivity reactions
- Complications with anesthesia
- Critical medical conditions
- Continuing treatments and implants
- Changes to ordinary treatment routines
- Contagion

The presence of critical information is indicated by a red health indicator in the EMR, making the healthcare personnel aware of it even before they open the SCR.

Information about the Norwegian definition of Critical Information is published on [our web-site](#)<sup>ii</sup>

## Planned extensions to the Norwegian Summary Care Record

### Reference information to clinical documents

The SCR will include an overview of clinical documents available in all Norwegian hospitals. This includes discharge summaries, x-ray results and laboratory results. The documents can be retrieved from the source where it is stored using the IHE-XDS protocol.

The software is scheduled for piloting in the third quarter of 2019.

### Development of program interfaces (API) for direct integration to the EMRs

HL7 FHIR protocols are developed so the data in the SCR database can be read directly from the EMRs. This opens for decision support using the data in the SRC directly in the users work surface in the EMR. The first APIs are already ready for use, but the main APIs is still under development.

### Extending use to the nursing homes and homecare

Nursing homes and home health care do not have access to the SCR today. Extending the use of the SCR to these users are in preparation and the first nursing homes will have access to the SCR in 2019.

## Privacy and consent

The Norwegian SCR is established for all citizens automatically. You must opt out if you do not want a SCR. The number of persons who have opted out have changed very little since the start of the program. A total of about 5000 persons have opted out. It is about 0,1% of the population, hence 99,9% do have a SCR. As a citizen you may access your SCR through the Internet with a secure log on. As a health care professional, you must access the SCR through the Electronic medical record by using a high security log on.

As a main rule a health care professional must have the patient's consent to access the SCR, but there are extensive exceptions to this rule. A health care professional does not need consent if

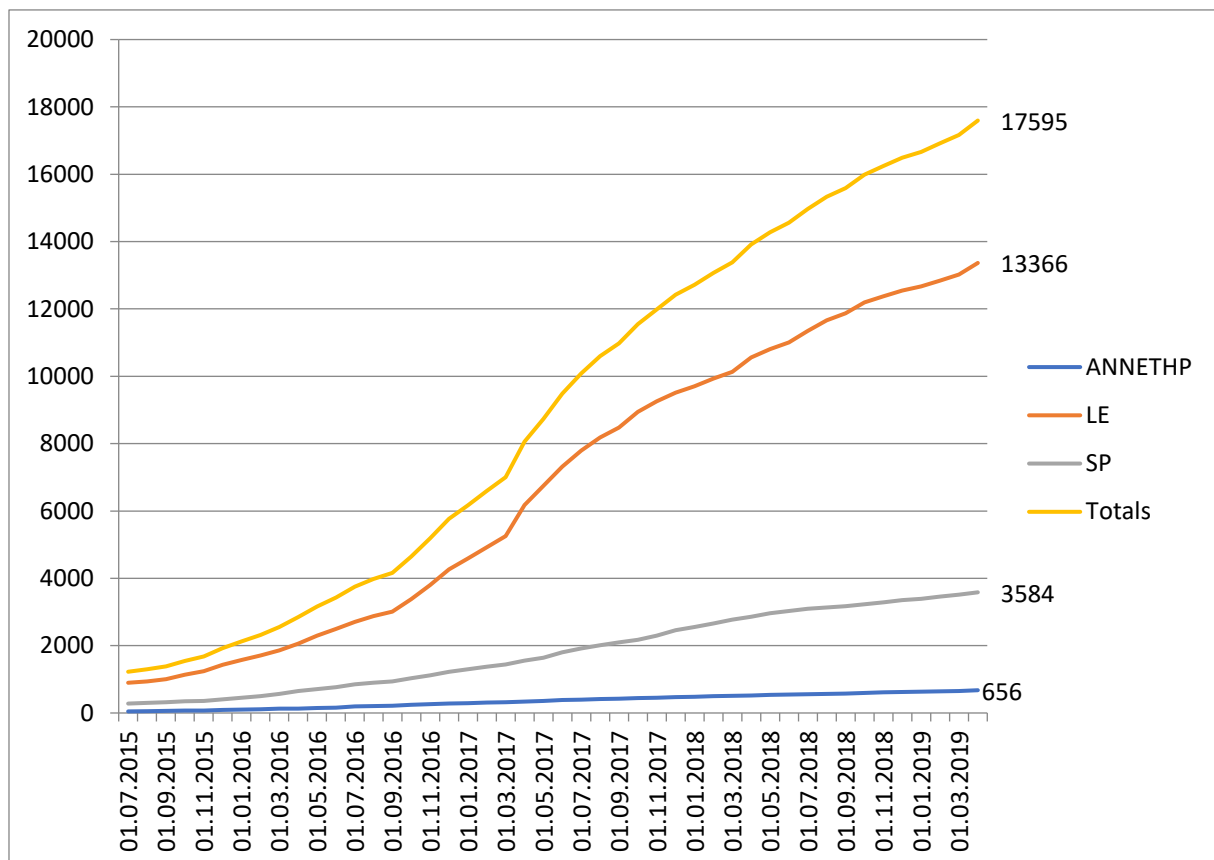
1. there is an emergency
2. if you are the patient's general practitioner
3. if you are employed in the emergency departments, if you are working in an emergency call-center or out of duty medical response-office
4. if you are a nurses or a doctor in specialist health care
5. If you are health personnel in a nursing home or home care service with medical responsibilities

In all these cases the patient privacy is established in other ways:

- All access to the SCR is listed in an access-log that is available to the patient on the internet. The name and workplace of the health care professional that have accessed the SCR is listed.

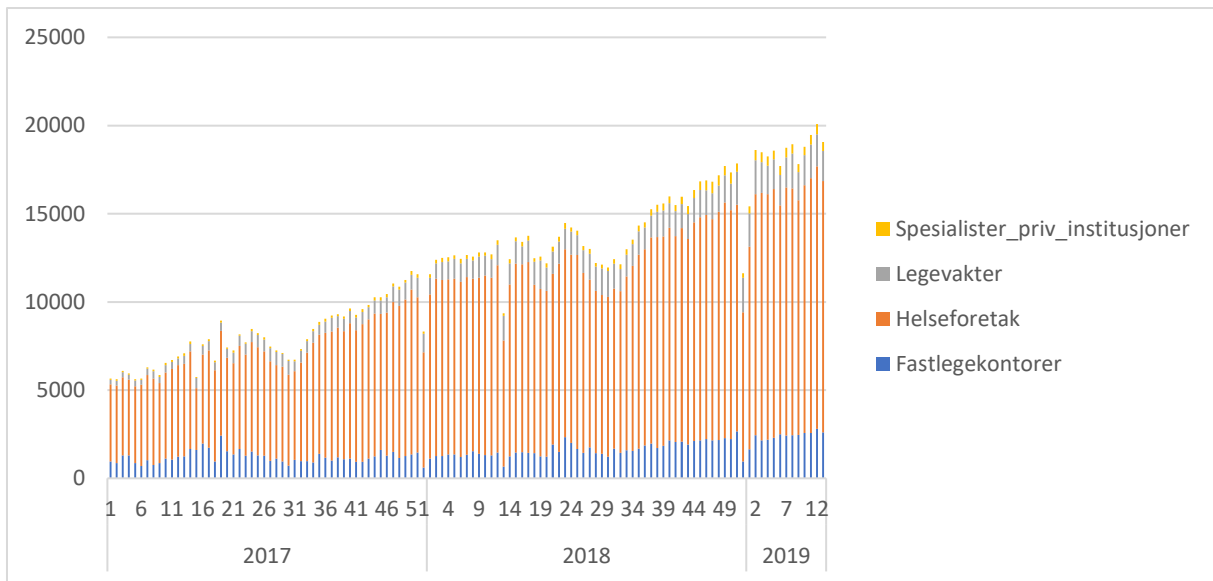
- As a patient you can subscribe for email warnings if anyone opens your SCR.
- The patient can block access to the SCR or parts of it. By activating this type of blockings the patient requires all health care personnel to actively consent to having a valid reason to attempt access. The consent screen is also shown to health care personnel who are not normally required to provide consent. The patient can ask for a warning if anyone bypasses the consent screen. Unauthorized access to the SCR is a serious crime and health care professionals will face legal actions if doing so.

## Usage of the Norwegian Summary Care Record

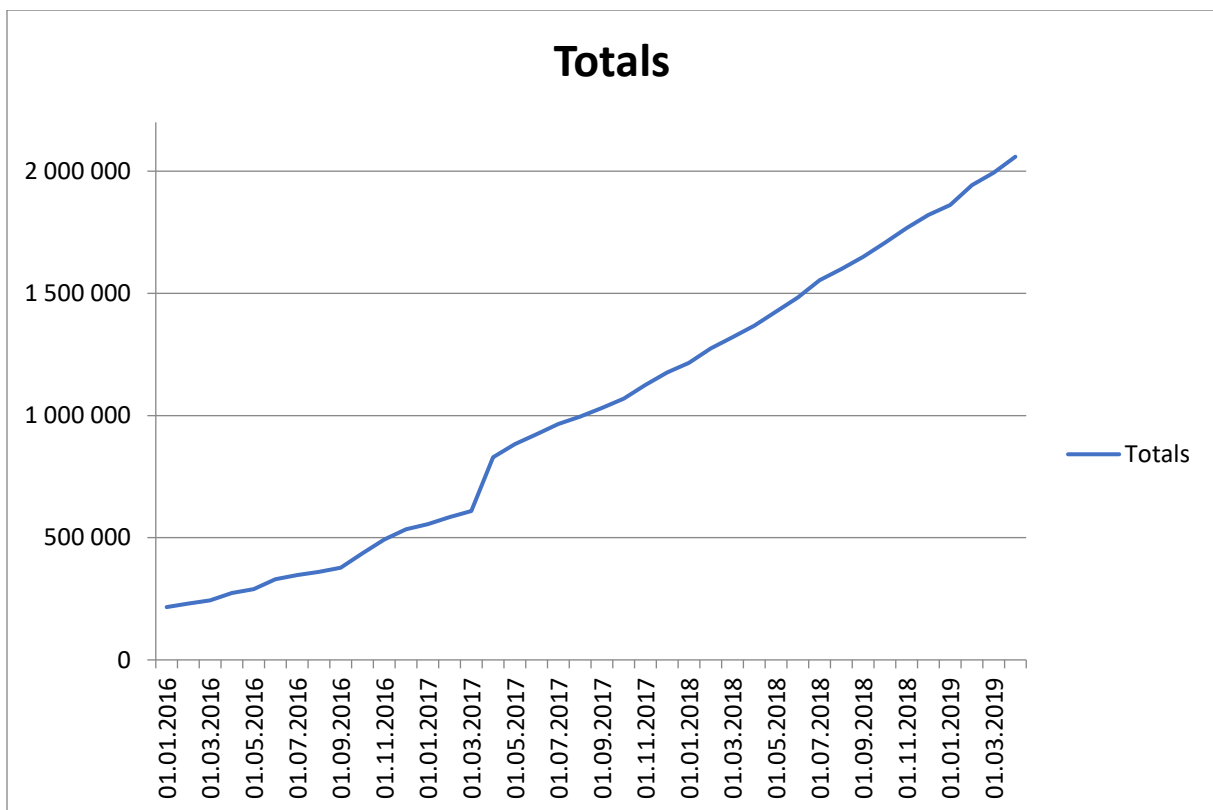


Number of health personnel who have used SCR:

- Totals: 17 596
- Doctors: 13 366
- Nurses: 3 584
- Other: 656



Health personnel are increasingly using the SCR. Average number of look-ups so far in 2019 is approximately 18 790.



Approximately 2.000.000 citizens (38%) have accessed their own SCR with secure logon to the internet. 315.000 citizens have entered information in their own SCR.

<sup>i</sup> Report No. 47 to the Storting (2008-2009)

<https://ehelse.no/Documents/Kjernejournal/Critical%20and%20important%20health%20information%20in%20the%20Norwegian%20Summary%20Care%20Record.PDF>