

# CSAM Connected Healthcare

Breaking down information silos will revolutionise the way people deliver health and social care.

# CSAM CONNECTED HEALTHCARE

## The Future

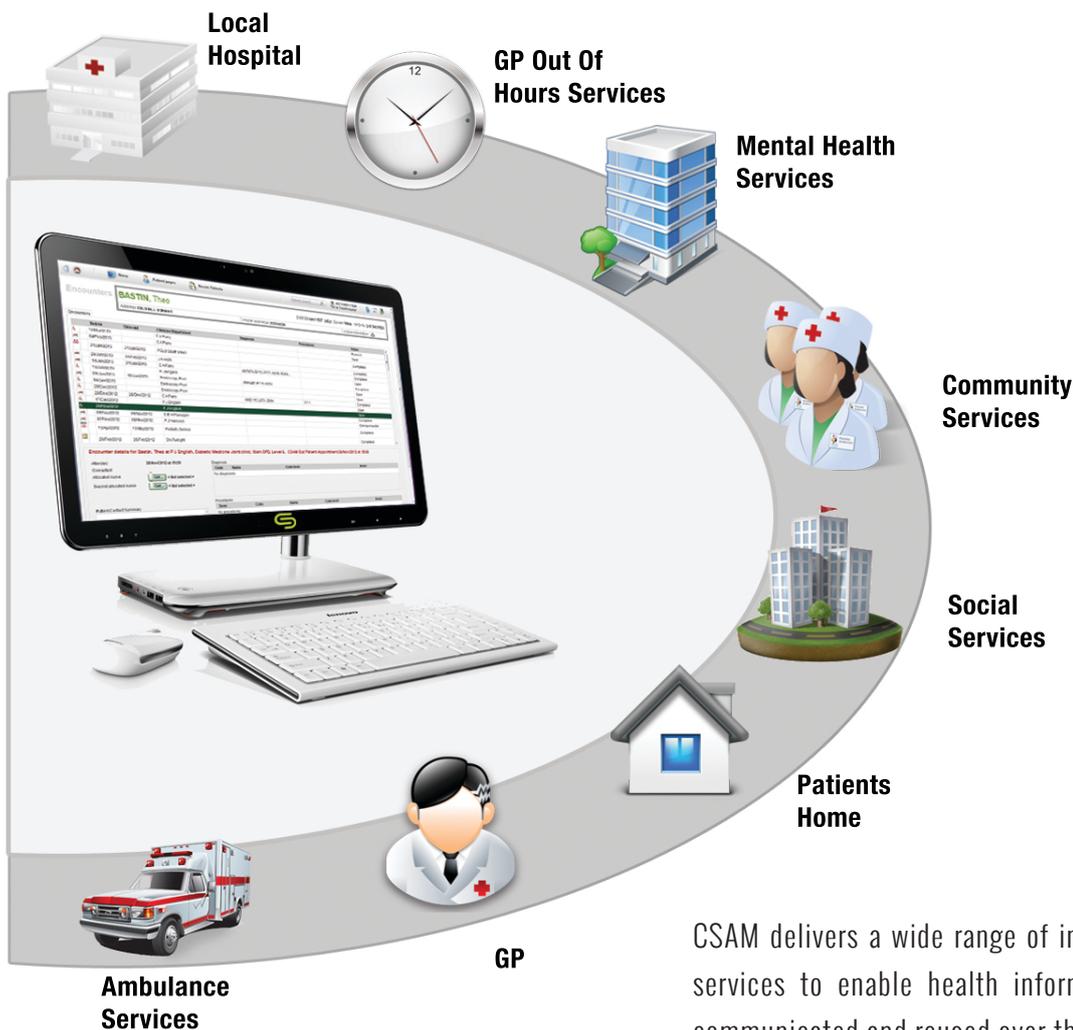
Health and social care delivery models are changing. Future healthcare delivery is a world in which patient information is gathered, shared, reused and enhanced throughout the entire health and social care system.

As the patient travels between different health and social care services their total information will be accessible according to user rights. This idea is what we call 'Connected Healthcare': an environment where health information is unlocked from legacy systems and organisational boundaries to become an information asset for everybody involved in care delivery. This is available now!

## Making the Connection

There are two steps to making the connection. First, all the required systems are joined to the CSAM Connected Healthcare Engine. Any and all systems can be linked to the engine to gather all the relevant patient data.

Having pooled all the data, the second step is to turn that data into information by making it available in an intuitive, user-friendly display. Each of CSAM's user platforms offers views of the data customized to different user groups, as well as providing a comprehensive set of tools to handle tasks such as placing requests, care planning and results presentation.



CSAM delivers a wide range of innovative software products and services to enable health information to be gathered, shared, communicated and reused over the entire care delivery system.

# THE PLATFORMS

The CSAM Platforms provide users in care organisations with comprehensive, shared, up to date access to patient information. They offer a true 'one patient-one record' solution by connecting systems and information sources throughout the health organisation.

The on-screen work environments are web-based clinical portals with different portal applications. These provide access to the integrated healthcare system through, for example clinical overviews, patient lists, work-lists, order communications and care plan functionality.

Security is set at a very high standard. There is an internal security model, but the system will also work with external models. The connected source systems can be accessed directly through the portal (according to privileges), retaining patient context and providing single sign-on capability.

## The User View

For the user the core of the system is the set of user screens. They gather the patient information linked to the CHE into a single, consistent set of views, regardless where it has come from. All patient clinical documents together in the same place, all results in the same place, all care plan tasks and activities in the same place.

This example screen from the Acute Platform shows how the information is set out in easy to read displays. At a glance, clinicians get an overview of all the information, regardless of source, about the patient in front of them. More detail about each item, such as a document or a lab test, is a click away.

The screenshot displays a comprehensive patient overview for Kari Normann. The interface is divided into several sections:

- Left Sidebar:** Navigation menu with options like PATIENT LISTS, WORK LISTS, MY CALENDAR, THE STATISTICS, and a 'Live Data' section.
- Top Header:** 'Today JAN 8TH' with a schedule of events: 08:15 - Daily Meeting, 09:30 - Patient Round, 13:00 - Analysis Lab, 14:00 - Update Meeting, 22:00 - Patient follow-up.
- Central Patient Search:** A list of search results for 'AVD. 1', including patient names, SSN, and room numbers.
- Right Panel (Patient Profile):** Details for Kari Normann, including age (69 år), critical info (CAVE: Penicillin), diagnosis (ICD-10 kode: C34.9), location, and contact data (Doctor: Anna Hansen, Cancer coordinator: David Olsen).
- Vital Signs:** A line graph showing temperature, blood pressure, heart rate, and weight over time (20/09-13 to 22/09-13).
- Medications:** A table listing drug names, doses, and times.
- Medical Documents:** A table listing various documents like Discharge Summary and Examination Results.
- Examination Results:** A table listing test results, dates, and event types.

Annotations highlight key features:

- The status bar lists demographic and critical information:** Points to the patient profile section.
- Location tells you where inpatients are located:** Points to the 'Location' field in the patient profile.
- All the test results are accessible, regardless of their location:** Points to the 'Examination Results' table.

# THE PLATFORMS

## Acute, GP and Community Platforms

The three clinical platforms provide broadly similar sets of screens, each tailored to the particular needs of the different user groups. Each provides a web based clinical portal with different portal applications giving access to the integrated healthcare system through clinical overviews, patient lists, worklists, document lists (including discharge notes etc), order communications and care plan functionality.

Starting from a patient view, which gives an overview of those in whom the user has an interest, the user can access the overview screen for individual patients. This in turn gives access to more detail, such as the particulars of lab tests pooled from a range of systems, showing trends and highlighting unusual results.

## The Patient Platform

The Patient Platform enables healthcare providers to include the patient in planning and show the status of healthcare delivery (referral status, discharge summary, medical records). Patients can supply information pre- and post-admittance through electronic forms.

The solution ensures that information is instantly updated and available, and becomes a natural part of the healthcare provider's daily practice.

The working environment is a web-based customer portal with different applications, providing access to the integrated healthcare information.

As part of the Patient Platform solution, CSAM is also developing mobile applications to enhance workflow and communication with patients.

## The Management Platform

The Management Platform is one of the core products in health service management from CSAM. It supports both aggregated, clinical and administrative management in service provisioning and quality of healthcare services.

The CSAM Management Platform lets users monitor performance statistics through a web-based management portal or as a mobile solution. It is aimed at health managers and administrators who need a quick overview on critical performance indicators. It provides analytical tools to investigate different datasets, predictions and statistics.

At a management level monitoring health delivery services (in terms of the speed, cost and volume of service delivery, service quality and regulatory compliance) is central to effective operation.

At a clinical level, monitoring patient flow, clinical test management, meeting required standards and discharge letter despatch are essential to manage efficient and effective healthcare delivery.



# CSAM CONNECTED HEALTHCARE ENGINE (CHE)

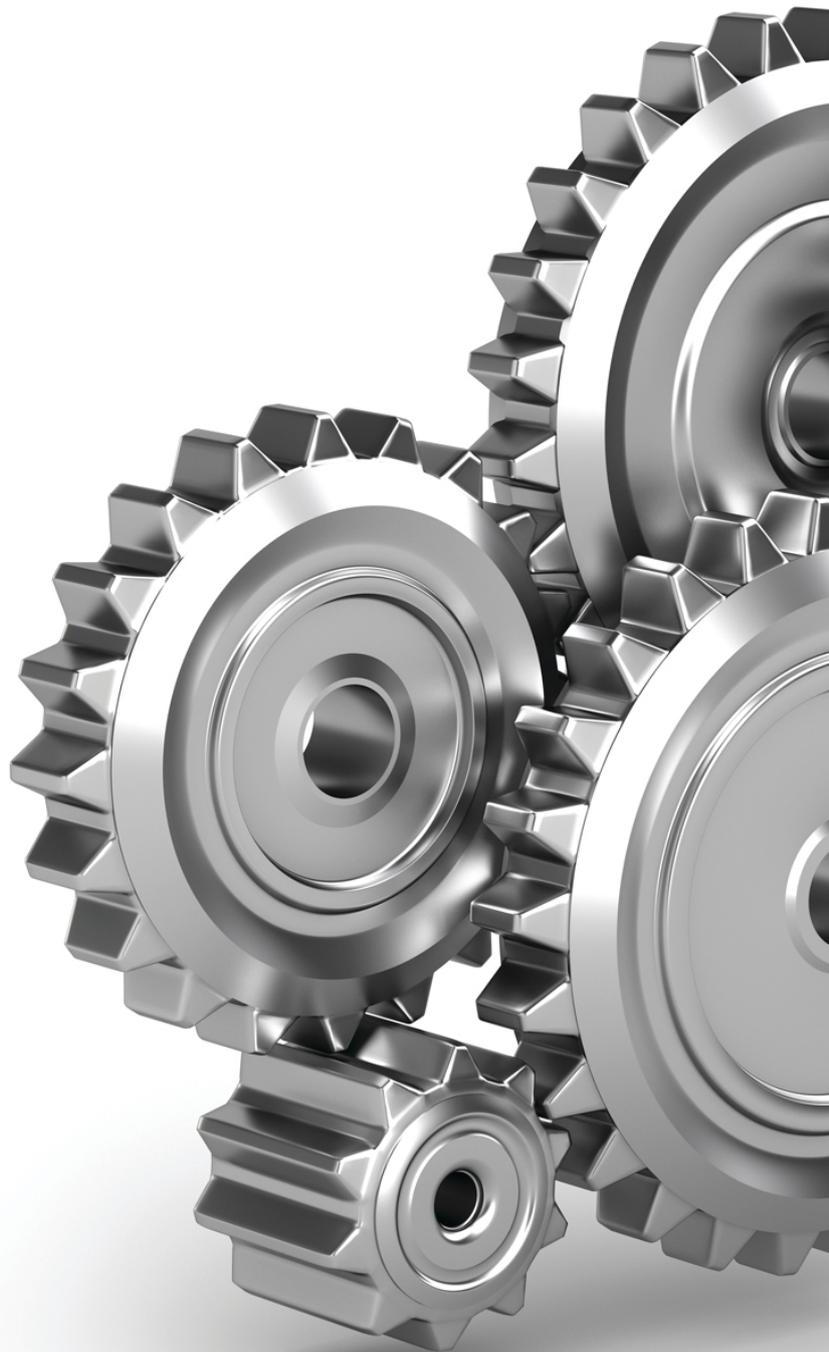
The Connected Healthcare Engine (CHE) product, developed exclusively by CSAM, collects, stores, transforms and shares information throughout health and social care delivery.

CHE provides the data gathering and interoperability capability vital to linking data sources. It gives the storage and security necessary for managing sensitive health and social care data, including a range of user-access control models.

The Connected Healthcare Engine has been built using standard health-specific information models. It conforms to recognised national and international standards for health information.

Using the CSAM Connected Healthcare Engine, CSAM delivers dedicated interoperable platforms for different healthcare organisations within the healthcare environment.

The platforms are tailored work environments with applications to integrate, access, view, modify and share health information..



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CONNECTED HEALTHCARE

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