CLINERION Patient Network Explorer

Hospital Network for Real-time, EHR Data Re-use in Clinical Trials and Real World Evidence

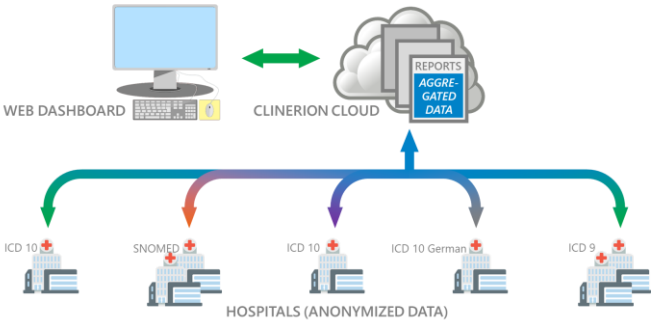
Clinerion's Patient Network Explorer saves trials time:

- **More efficient and effective trial recruitment**
- **Results within minutes**
- **Patient (re-)identification 24/7, in real time**

Clinerion's Patient Network Explorer addresses the critical barrier of slow clinical trial recruitment by running live searches for candidate patients across multiple networked hospitals, simultaneously.

Clinerion uses leading-edge, proprietary, big data analytics techniques to search for patients fitting protocol criteria. The system searches for suitable clinical trial candidates using hospital electronic patient records (EHRs), in real time. Eligible candidate patients may be re-identified by trial sites.

Highly Scalable Hybrid Cloud- and Federated-server Network

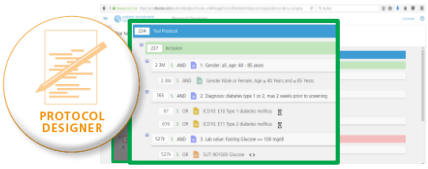


Each participating hospital operates a dedicated Clinerion server. The servers synchronize with their hospital's Health Information System (HIS), de-identifying the data by removing patient identity information, and indexing the data for faster search. Each server is then queried from Clinerion's cloud.

For hospital groups or research consortia, the Clinerion cloud can be further subdivided into private, secure, "local" clouds.

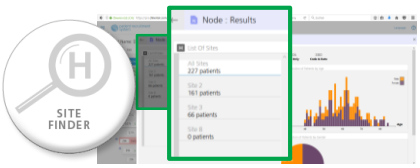
Leverage EHR-data at hospitals, find trial sites & eligible patients in a seamless, real-time process

Set up the protocol with **Protocol Designer**



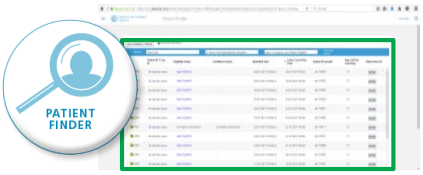
Queries performed with unlimited criteria and five dimensions of query: diagnoses, medical procedures, demographics, lab data and drugs prescribed. Results are shown live.

Locate eligible candidates with **Site Finder**



The system returns aggregated results showing the numbers of eligible patients at each connected hospital.

Recruit patients with **Patient Finder**



Authorized personnel at trial sites screen eligible candidates. Validated patients can be identified for enrollment in a clinical trial. Patients are delivered in as soon as they enter the system.

Example Use Cases

Rare Diseases: Clinerion's Patient Network Explorer identifies single patients within millions of records in minutes.

Studies with narrow inclusion / exclusion criteria: Patient Network Explorer validates protocols to ensure a target population exists, then finds eligible patients within the network.

Real-time recruitment: the query runs during a trial, notifying the study investigator as soon as a new patient becomes available.

Patient data analytics: gathering of data for Real-world Evidence, Phase IV / post-marketing surveillance studies and Market Access facilitation.

Patient Privacy and Data Security

ANID

Patient privacy is secured by use of Clinerion's proprietary ANID technology, which only uses de-identified patient data unlinked from identifiers, and by ensuring identifiable patient data does not leave the hospital. Data security is ensured by multiple firewalls, one-way data connections and user authentication.

Clinerion is fully compliant with data privacy regulations in the USA (HIPAA) and the European General Data Protection Regulation (GDPR) (EU 2016/679).

HIPAA Health Insurance Portability & Accountability Act

Any use of the system always depends on the express permission of participating hospitals and is done in accordance with relevant local / federal legislation.