

12.2.8 Clinithink

Clinithink's tools enable analytics and querying over SNOMED CT encoded patient data ...TheCLiX CNLPplatform transforms clinical narrative into rich structured data for healthcare providers and solution vendors. CLiX ENRICH, powered by CLiX CNLP to support analytics, converts unstructured clinical data into actionable data required to help solve today's toughest healthcare business problems.



For more information please visit <http://www.clinithink.com/>.

Building on the capabilities of its CLiX Clinical Natural Language Processing (CNLP) platform, Clinithink has created a solution to enable the analysis of healthcare data sourced directly from clinical narrative called CLiX ENRICH. This technology can be integrated into existing healthcare solutions to process any relevant narrative and encode the key clinical elements – medications, diagnoses, procedures, symptoms and findings – using SNOMED CT. These features can then be queried using powerful, user-definable SNOMED CT queries to present structured data in a form that can be easily consumed by existing BI platforms.

For example, when the narrative text below is typed into diagnosis and observation fields (respectively), Clinithink is able to provide a list of possible coding options for manual confirmation (as shown in [Figure 12.2.8-1](#)below).

***HX:** She presented with occipital headache for last six hours. She has been intermittently nauseated but has not vomited. Mild fever. She has no past history of headaches but has a past history of asthma. Mother has a severe allergy to penicillin but she has no known penicillin allergy. Currently taking paracetamol prn.*

***OE:** BP is 102/60, pulse 70, respiratory rate 20, temperature 37.2 C. Nasopharynx normal, both tympanic membranes normal.*

- ▲ **History**

 - Occipital headache
 - six hours
 - Nauseated
 - not** Vomiting
 - ▲ Fever
 - Mild
- ▲ **Past History**

 - no** History of headache
 - History of - asthma
- ▲ **Family History**

 - ▲ Allergy to penicillin
 - Severe
 - Mother
- ▲ **Allergies, Risks, Warnings**

 - no known** Penicillin allergy

- ▲ **Medications**

 - ▲ Paracetamol
 - As required
- ▲ **Observations and Findings**

 - ▲ Blood pressure
 - 102/60 units: none
 - ▲ Pulse finding
 - 70 units: none
 - ▲ Respiratory rate
 - 20 units: none
 - ▲ Body temperature
 - 37.2 units: none
 - Nasopharynx normal
 - ▲ Tympanic membrane normal
 - Right and left

Figure 12.2.8-1: Clinithink narrative text and possible coding options