

KNOWLEDGE

At a Glance

At Mind Computing we know the issues you face with terminology mapping. Mapping is expensive, time consuming, error prone, resource intensive, incomplete, and outdated. COVID-19 has only shed more light on all of these issues. With Mind Computing’s KNOWLEDGE you can modernize your terminology curation and let go of the frustrations that come with terminology mapping. KNOWLEDGE is an innovative web application that enables you to integrate and manage your local terminology with meaningful use standards—and removes the need for mapping to share patient data. KNOWLEDGE enables you to achieve semantic interoperability—the ability for health systems to openly communicate with each other— by implementing Solor’s integrated terminology & knowledge layers. KNOWLEDGE improves all your terminology by utilizing state-of-the-art description logic with a description logic reasoner. KNOWLEDGE enables you create the additions and changes needed for your healthcare enterprise and set the frequency of your terminology content releases based on your schedule—you are “in charge.”

The COVID-19 pandemic has “exposed a lot of inefficiencies” in the healthcare system—with one of the largest being data sharing and access.

Seema Verma

Centers for Medicare & Medicaid Services (CMS) Administrator | Source: [Article](#)

TAKE CHARGE OF YOUR TERMINOLOGY NEEDS



Normalize Clinical Data: Integrate your locally-curated terminology with meaningful use standards to assure functionality of local HIT applications and semantic interoperability.



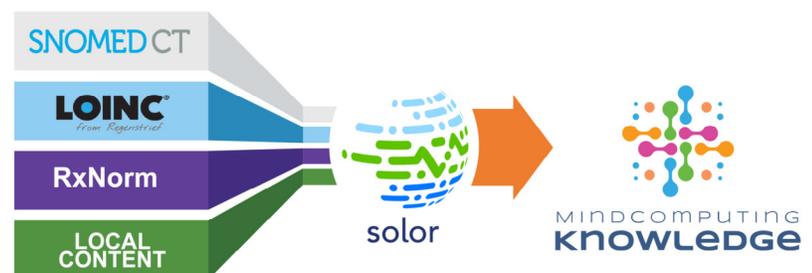
Extend Meaningful Use Standards: Distribute your modifications to meaningful use standards to share these key updates to your partners in standardized extension files.



Modernize Concept Definitions: Use W3C’s description logic standard OWL 2.0 and the open source [Snorocket](#) description logic reasoner to classify OWL EL++ to improve clinical decision support applications.



Software as a Service: Breathe easy, we do all the work. KNOWLEDGE is deployed in the cloud—and managed by us—so you concentrate on what you know best—the terminology for your organization. We update meaningful use standards in KNOWLEDGE so that your environment always has the latest versions available from all the standards organizations.



KNOWLEDGE helps you preserve the meaning of clinical data

Individuals receive healthcare from more than one health system or provider and expect the seamless sharing of their health records. Today a large percentage of healthcare systems rely on data mappings to share clinical data between systems about a patient. Mapping introduces unnecessary complexity and additional opportunities for error that can lead to patient morbidity and mortality. Mapping is an ongoing labor-intensive, expensive, and error-prone process. Healthcare systems must achieve *semantic interoperability*—the ability to unambiguously exchange information where the sending and receiving systems interpret the data the same way. KNOWLEDGE allows you to overcome mapping challenges by adding concepts using standard codes or logical expressions that conform to a description logic model which preserves the meaning of patient data. By preserving the meaning of clinical data, you can focus on using data to improve patient outcomes.

KNOWLEDGE allows you to integrate locally curated terminology with standards

KNOWLEDGE transforms meaningful use standards and locally curated terminology into Solor’s common model/standardized representation. Using Solor, KNOWLEDGE standardizes the encoded data model and enables meaningful use standard extensions that can be shared with other healthcare systems.

KNOWLEDGE is available as a SAAS

KNOWLEDGE’s software as a service includes standard administrative, security capabilities, and version control of the meaningful use standards you want in your KNOWLEDGE environment. You can then integrate your locally developed terminology with your choice of meaningful use standards.

KNOWLEDGE provides an architectural foundation to enable semantic interoperability

The open source Logica Solor project defined five architectural layers in an effort to assist HIT applications achieve reliable semantic interoperability. The *Semantic Interoperability Foundation* is defined by the *Foundational Architecture* and *Terminology Knowledge* layers. KNOWLEDGE assists organizations in extending this semantic interoperability foundation by creating new content, modifying existing content, and exporting these changes for HIT applications use.

Foundational Architecture Layer:

This layer defines a standardized representation for terminology.

Terminology Knowledge Layer:

This layer builds upon the foundational architecture to create artifacts of medical terms and codes (i.e. SNOMED CT, LOINC, RxNorm) that define what can be observed and requested.



Find out more.

◀ Scan QR Code to visit our website

Learn more about KNOWLEDGE by visiting our product page on the Mind Computing website.

www.mindcomputing.com/products