

OHIE Architecture additions for Supply Chain

LMIS

Icon: ?

Where: Both in OHIE Component Layer & Points of Service (PoS)

Description:

A Logistics Management Information System (LMIS) is an IT system that plays a central role in enabling commodity visibility and operational management of a wide-area supply chain operation. Typically the commodities in this supply chain are health-related, the organization that sponsors the system is a department or agency under a government's health ministry and the operation is carried out at scale for an entire region or even an entire nation. An LMIS typically bridges the health and supply chain operations by enabling re-supply workflows for clinical locations and the vertical programs targeting families of commodities, as well as interfacing with supplier's IT systems to ensure the re-supply process is fulfilled as needed. Particular LMIS tools may have additional capabilities that enhance these re-supply workflows and/or add to the maturity of the wider supply chain operation.

Reasoning for an LMIS to sit in the OHIE Component layer: An LMIS is typically a bridge system between the health enterprise and the supply chain domain. As a bridge system it serves as a central connector for the health enterprise to place requests for resupply with suppliers, track the progress of the fulfillment of that re-supply, and have visibility into how health commodities are being used across the enterprise. In this role an LMIS needs to be integrated with 1) supplier's IT systems, 2) asset and capital management systems (e.g. Lab equipment, CCE, RTMD, etc), 3) national registries for safe and effective products.

Reasoning for an LMIS to be at the PoS layer: An LMIS typically will be in use at a clinical location (or an LMIS paper form will originate from one) assisting the clinic in the resupply workflow. It's possible that an alternative to listing the LMIS in the PoS layer would be to instead assume that 1) another PoS system takes on this capability or 2) that we add another icon more specific to the capability such as "Inventory & Resupply". At this level an individual clinical location may not have much visibility into the rest of the health supply chain, and because of this it could make sense to not confuse the diagram with LMIS in both the component as well as the PoS layers, however many countries which have an LMIS already see it in this dual role - at a component layer as well as a PoS system.

Product Catalog

Icon: ?

Where: Along with the other OHIE Registries (e.g. HWR, TS, etc)

Description:

A Product Catalog serves as the source of truth about what a Product is within an HIE. It sources the information for this role through two expected means: 1) as the ongoing result of a process of master data management to properly define and categorize medical products and 2) as derived data on the proper definition and categorization of medical products (e.g. GS1 GDSN).

Reasoning for a Product Catalog to be located with the other registries: A Product Catalog serves as the source of truth for defining products and their categorization(s) for the HIE. This role is similar in kind to other registries which serve as the source of truth for Facilities or Clients such as the Facility or Client Registries. A Product Catalog does have some similarities to a Terminology Service in that it will map equivalent product codes to one another, however as mentioned above the product catalog adds additional capabilities specific to the nature of how product definitions are created, the roles of the various organizations involved in this process, and the external systems which already hold some of this data.