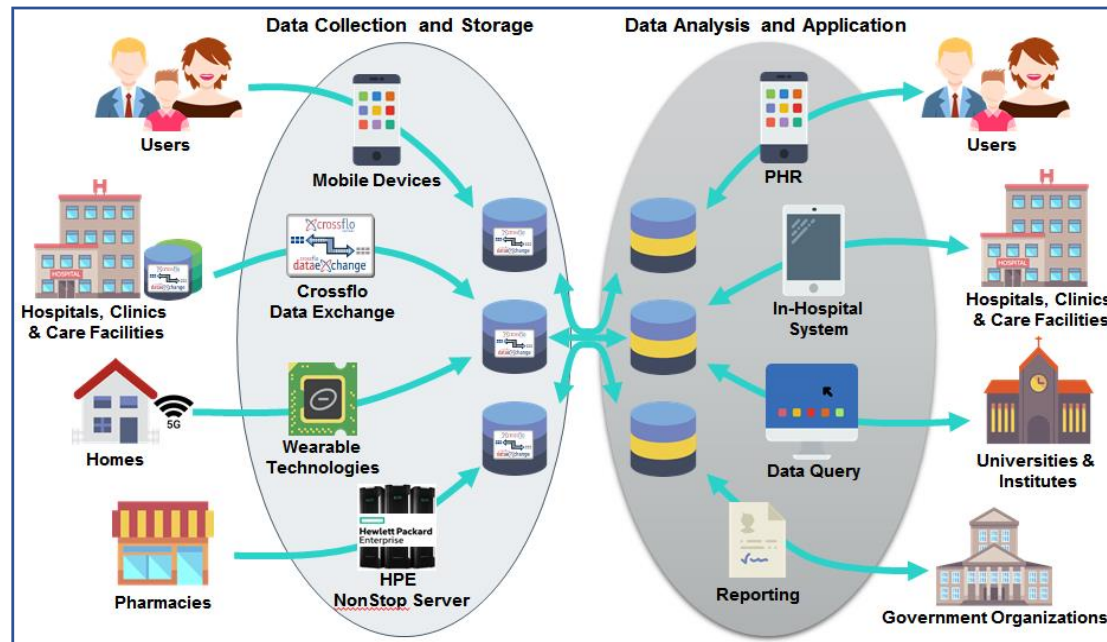


The **National Center for Healthcare Informatics (NCHCI)**, **Crossflo Systems** and **Hewlett Packard Enterprise (HPE)** are pleased to offer **Data Exchange As A Service (DXaaS)**.

DXaaS can be utilized as the foundation for a Healthcare Information Exchange (HIE) or as a service platform to enable additional service offerings for an existing HIE.

Common uses for DXaaS include:

- Community health monitoring and epidemic surveillance
- Ability to track and manage Healthcare resources and supply chain
- Immediate access to complete patient records/history for healthcare staff
- Improved clinical decision making for healthcare providers



DXaaS

Data Exchange as a Service

Utilizes national data sharing standards (NIEM/HL7/FHIM-FHIR), transport mechanisms (Web Services, ESB, MQ, FTP) and integration methods (XML Schema, Web Services, Pub/Sub)

Provides real-time transformation and publication of data to approved subscribers

Leverages existing architectures, applications and databases using a transparent client for faster installation.

“Hub and Spoke” architecture provides hierarchies of reporting (Local, County, State & Federal) and infinite scalability – ensures value of data reporting at every level of hierarchy.



The **National Center for Health Care Informatics (NCHCI)** is dedicated to healthcare innovation by advancing new technologies and services, improving the management of data and information, and seeking solutions to complex problems facing our healthcare industry.



The Crossflo DataExchange® (CDX)

Linking proprietary systems for true semantic data interoperability, CDX allows disparate EMRs, EHRs and Hospital and Physician systems to easily share data.

Hewlett Packard Enterprise

HPE NonStop systems are designed from the ground up for mission critical environments that demand continuous business and 100% fault tolerance. NonStop eliminates the risk of downtime while meeting large-scale business needs, online message processing, and database requirements.

Healthcare Data Sharing and Reporting Challenges:

Many Data Types

Clinical, Hospital, Labs, Imaging, Pharmacy, Patient

Many Data Systems

EMH/EHR, Hospital Management, Supply Chain, BI Dashboards

Many Data Elements

Complaints, Symptoms, Diagnosis, Disposition, Referral, Orders

Many Data Formats

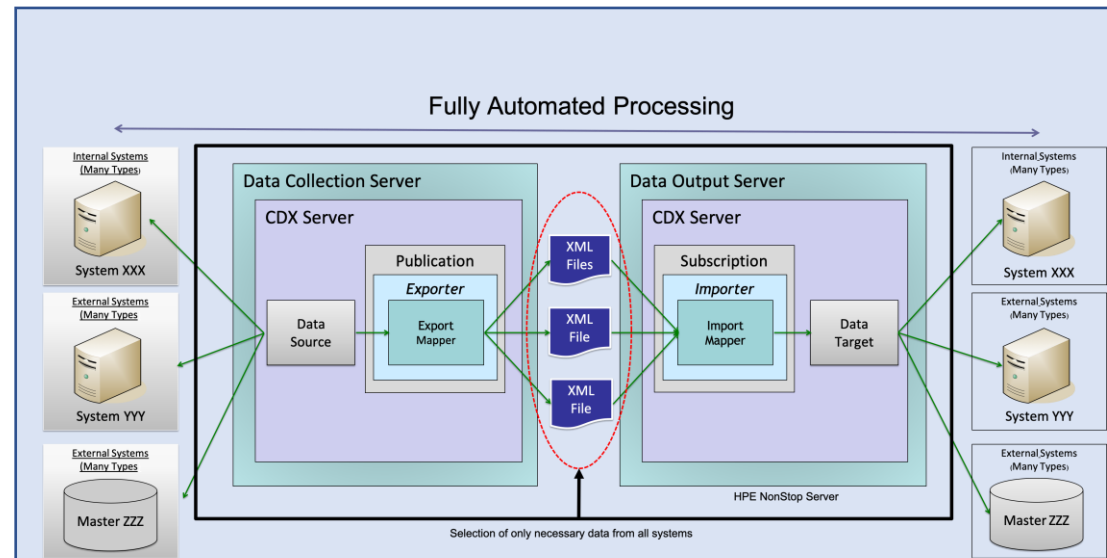
Proprietary/Vendor, Structured, Unstructured, Binary/Blobs

Many Different Entities

Public Health, Private Health, HMO, Federal, State and Local

Many Different Endpoints

Clinics, ER's, Urgent Care, Pharmacies, 3rd Party Labs & Imaging



DXaaS Endpoint Architecture

- Provides data in REAL-TIME (*rather than once a day*)
- Publishes and transforms ANY and ALL data to an understood federation model – Data Types, Data Elements, Data Formats.
- Translates and normalizes data both TO and FROM standard-based format
- Maps to ONE or MANY disparate data systems
- Configures LOCALLY, or manages REMOTELY, for each “publication” installed
- Consumes any “PUBLICATIONS” by means of “SUBSCRIPTIONS”
- Intelligent routing with SECURITY and PRIVACY policies for all transactions

Healthcare Data Sharing & Reporting Needs:

Health Information Exchange

Push, Pull and Query Data within the Healthcare Lifecycle

Regulatory Reporting

Local/County Health, State HHS, Federal HHS, DHS, CMS, CDC, NIH

Disease Surveillance

Required reportable/notifiable disease diagnoses

Syndromic Surveillance

Analytic monitoring of diagnosis/symptom frequencies by population/regions

Resource Management

Hospital/ICU capacity/vacancy -- Length of Stay/Diagnosis, Staff complements

Inventory Management

PPE, pumps, ventilators, test kits, Lab Supplies (tests/reagents)

Supply Chain Management

Sourcing/Availability of PPE, Ventilators, Lab Supplies (tests/reagents)

Collaboration Enablement

Private and Public Healthcare forums for sharing and centralizing emerging disease and treatment research/results