

Integration and Interoperability in Healthcare Systems

Challenges

Diverse data sources (EHR, Lab, Imaging, etc.) coupled with the lack of interoperability are the top challenges for Health IT.

Health IT organizations have no solution for its integration and interoperability challenges:

- Fall back on manual processes to fill gaps exposed by lack of interoperability / integration
- Rip-and-Replace heterogeneous with vendor lock-in homogeneous environment
- Increased health IT budget to develop integration technology
- Costly customized solutions in support of care providers' demands

Solutions

Establish data bus architecture to support integration and interoperability while leveraging previous IT investments.

Health IT needs a data bus architecture solution, presenting applications and care providers with a universal view of patient clinical data:

- Establish data bus architecture as middleware on top of existing infrastructure to support patient medical information flow without data duplication
- Health applications addressing providers' demands are cost effective (Develop once, Deploy anywhere)
- Open integration expands connectivity and collaboration beyond healthcare systems

Drivers for Change

Health IT needs to address providers' demands for solutions over diverse infrastructure.

Health IT faces the challenges from multiple fronts:

- Providers' demands for automation and solutions for specific care environments (applications)
- Customized solutions on top of non-integrated infrastructure are costly and inefficient.
- Only healthcare systems with major investments on IT can support such customized engagements
- Balance between increased solution demand, costly customized environments and health IT budget constraints

