

Community Health Information Exchange: The Cedar Rapids Experience

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Overview of Cedar Rapids Clinical Data Sharing Projects

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Current Cedar Rapids Clinical Data Sharing Projects

Shared Imaging Network

Shared high speed data network connecting PACS between facilities.

Shared Outpatient Orders System

Web based application utilized as common ordering platform for community.

Common Hospital Physician Portal Application

Common Physician Portal Application used by shared medical staff.

Office EMR CCD Sharing with hospital and other providers

Centralized data storage for office EMR CCD's, with controlled sharing.



Common Clinical Data Sharing Models

Peer-to-Peer – Ad Hoc Queries

All parties maintain their own clinical databases and share upon request.

Peer-to-Peer – Record Locator Service

All parties maintain separate clinical databases.

Centralized Record Locator Service stores limited demographics information from all data stores, and supports record location and transfer.

Federated:

All parties submit and share data through a centralized clinical database.



Cedar Rapids Shared Imaging Network

Sharing Model – Peer to Peer

System – Private Fiber Optic High Speed Data Network

Capabilities – High speed fiber network with established security between multiple PACS systems. Used for image transfer and remote PACS access.

Advantages – Shared medical staff view images from multiple sources in a common PACS viewer.

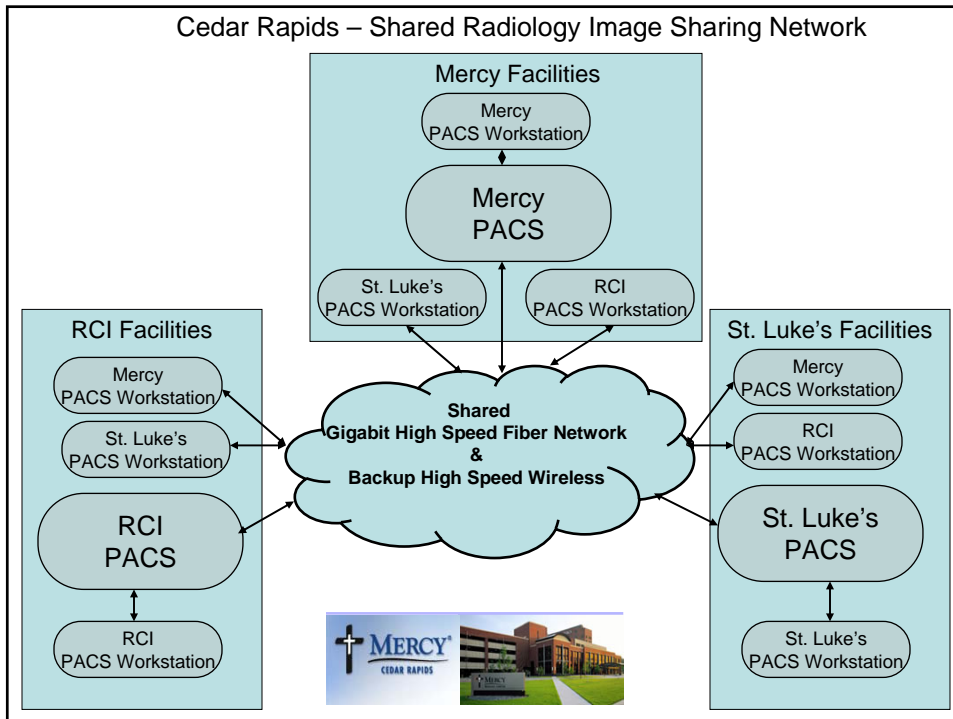
Users – Mercy Medical Center, St. Luke's Hospital, Radiology Consultants of Iowa

Financial Model – Shared ownership with both hospitals and Radiology group.

Future – Can eventually become shared community medical intranet.



Cedar Rapids – Shared Radiology Image Sharing Network



Cedar Rapids Outpatient Orders

Sharing Model – Hybrid Peer-to-Peer/Federated Model

System – Internet based Application Service Provider for Order Management

Capabilities – Shared Internet based service that allows physician offices to manage their own patient databases within a common database, and submit orders to participating service providers with follow-up messaging and order tracking.

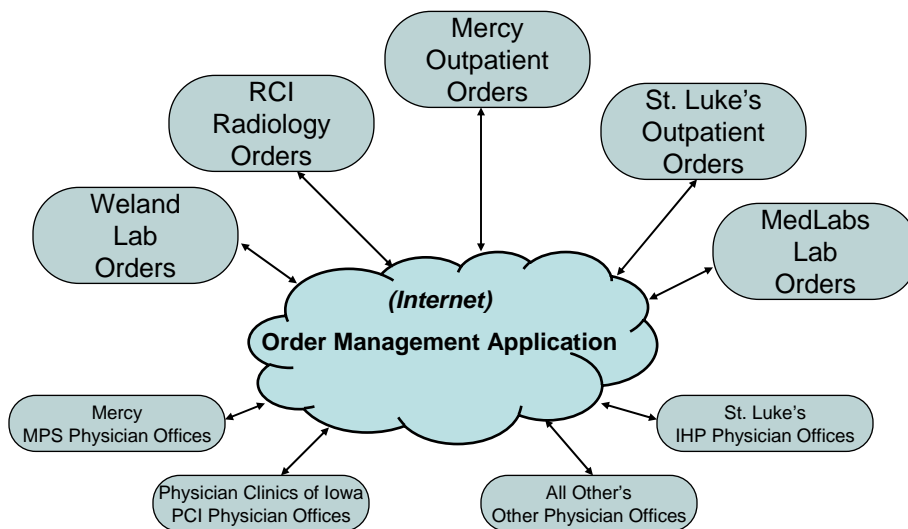
Advantages – Office's can submit orders to any reference lab or outpatient service using a single web based application and single login for the community service providers. All submitted orders are tracked and archived within the same system, and orders are pre-screened for medical necessity.

Users – Mercy Medical Center, St. Luke's Hospital, Radiology Consultants of Iowa, Weland Labs, and MedLabs as service providers, and private physician offices as ordering providers.

Financial Model – Shared governance model between participating service providers (Committee Chair rotates annually between service providers), and all have independent financial contracts with vendor. No cost to participating offices.



Cedar Rapids – Shared Outpatient Order Management System



Cedar Rapids Hospital Physician Portals

Sharing Model – Peer-to-Peer (Future will be Reverse Federated Model)

System – 3rd Party Physician Portal

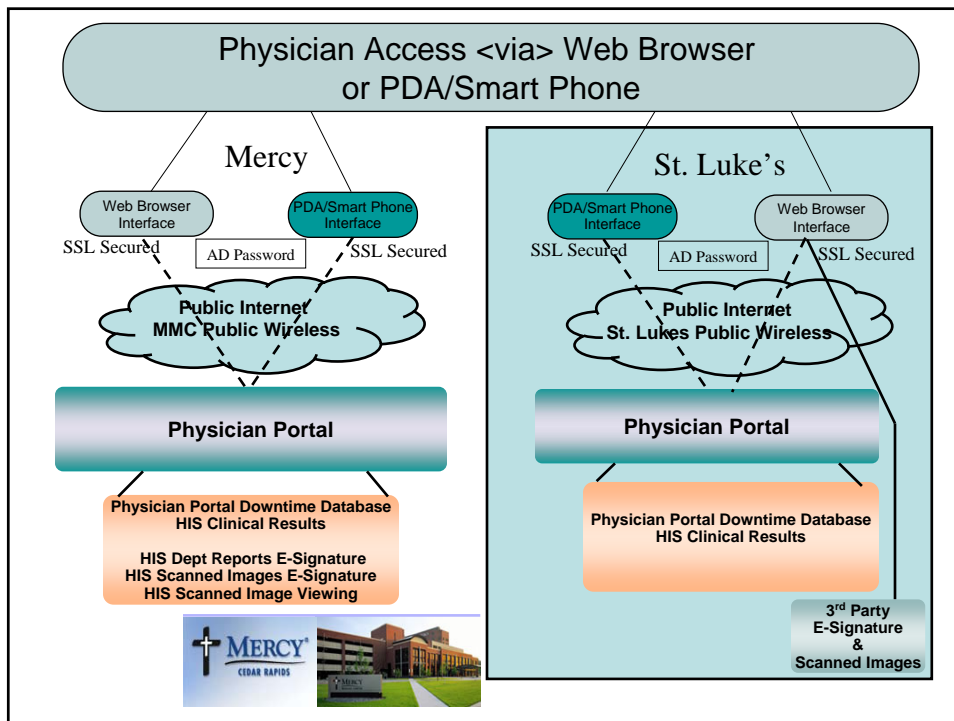
Capabilities – Common Web Based Physician Portal Application independently installed and integrated with each hospital's Hospital Information System.

Advantages – Shared medical staff utilize the same physician portal application

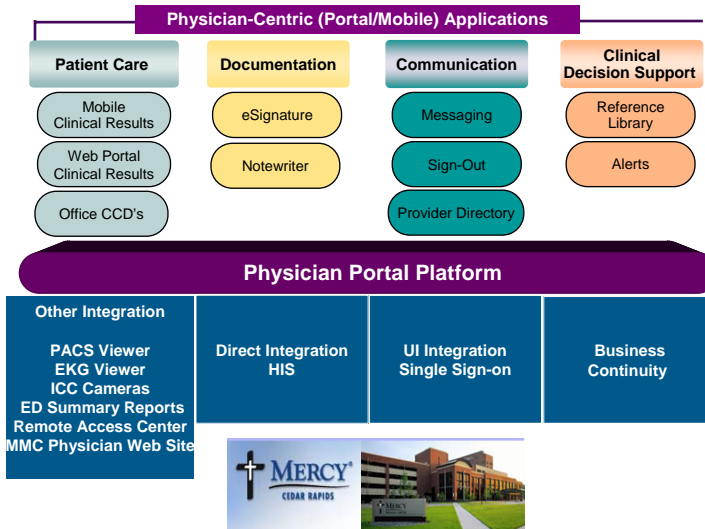
Users – Shared Medical Staff

Financial Model – Each hospital independently licenses the same portal.

Future – PDA/Smart Phone client users with access to both systems will be able to pull patient information from both systems into a combined personal clinical repository.



Physician Portal Clinical Applications at Mercy



Cedar Rapids MMC – Office CCD Sharing Project

Sharing Model – Hybrid Clinical Repository Model

System – Hospital Physician Portal & Office EMR

Capabilities – Office EMR CCD's stored in Mercy Physician Portal, and contributing physician group controls what physician groups can access the record. If patient is a current Mercy Medical Center patient, and physician is authorized to view both Mercy Medical Center patient information and patient CCD, the records are connected by the Physician Portal in a common clinical information viewer.

Advantages – Medical staff can access CCD's from their office through the hospital Physician Portal, and can share their CCD's with other medical groups if desired. CCD's immediately available without need for Record Locator Service.

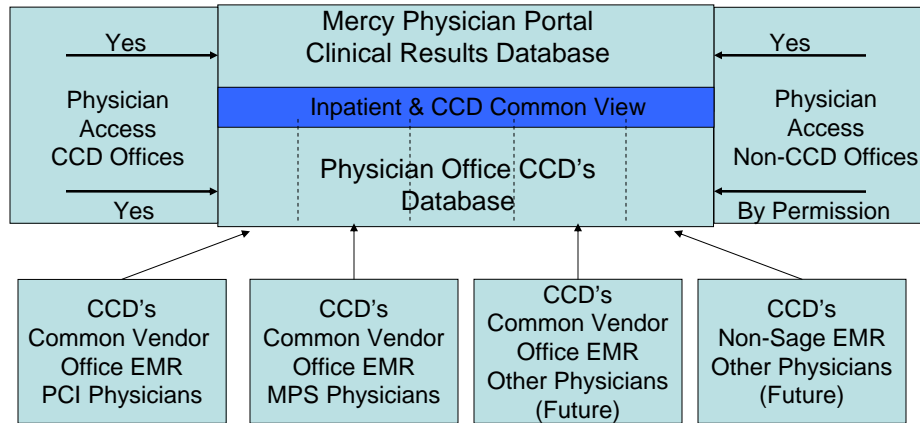
Users – CCD Contributors: Mercy Physician Services, Physician Clinics of Iowa
 CCD Users: Contributing Physicians, Emergency Room Physicians, Hospitalists

Financial Model – Application built into Physician Portal and Office EMR products.

Future – Additional common vendor EMR enabled offices can be added at any time, other EMR offices can be added with EMR vendor support.



Cedar Rapids MMC – Office CCD Sharing Project



Demonstration of CCD Sharing Project

**Tim Quinn, MD,
Medical Director, Mercy Medical Center**



Questions?

Thanks for your Interest and Attention

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and

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