Mapping the Data Flow:

Describing the Informatics Infrastructure in a Public Health Department

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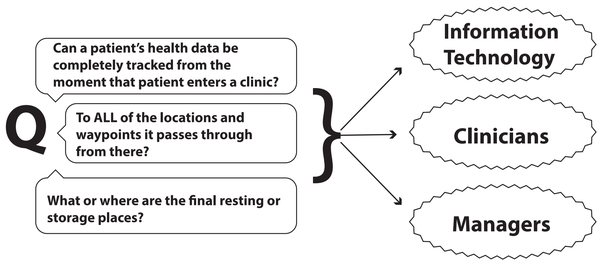
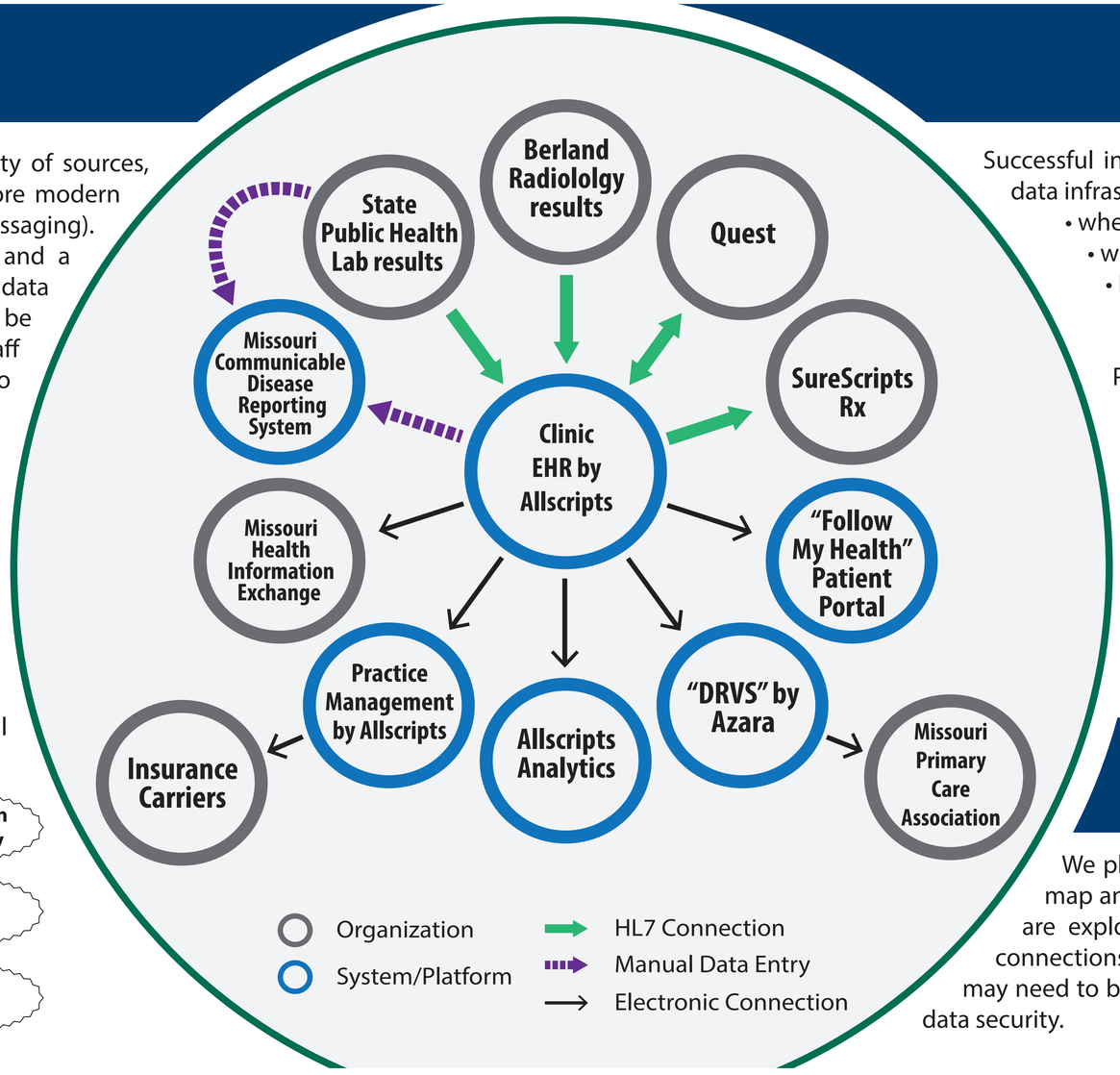
BACKGROUND

Health departments exchange data with a variety of sources, using both traditional (e.g. fax or email) and more modern and secure methods (e.g. automated HL7 messaging). Without sufficient understanding of data flow and a proper data management system, activities like data entry, case investigation, and tracking efforts may be inadequate or duplicated. Additionally, staff turnover and lack of documentation may lead to inactive or vulnerable data connections.

METHODS

We conducted exploratory interviews to discover and investigate the current data connections that link the St. Louis County Department of Public Health (DPH) electronic health record (EHR) to both internal and external data systems.





CONCLUSIONS

Successful informatics projects require a solid understanding of the data infrastructure, including:

- where data reside
- who has access to the data and at what stages
- how often data is accessed
- how data is used
- where data flows to and/or from

Proper understanding of the data infrastructure remains essential to productivity, cost savings, and security. The interviews revealed a variety of data sources and connections previously unknown to many DPH employees. The data map will be considered a living document, reviewed and updated on a regular basis. Establishing ownership of the document remains critical to ensuring sustainability for future projects. Information from this project will help to inform creation of data dashboards and lay the foundation for enhanced surveillance systems within DPH.

FUTURE DIRECTIONS

We plan to survey employees to collect feedback on this data map and assess ways to improve the document's usefulness. We are exploring ways in which DPH can more fully utilize these connections and resources while other, now defunct connections may need to be refreshed or deactivated to reduce costs and maximize data security.

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