Big Cities Health Collation Philadelphia Department of Public Health

PDPH's Data Modernization Journey Developing and Sustaining projects

Philadelphia EpIC team



Philadelphia Department of Public Health Epidemiology and Informatics Collaborative

- Epidemiology and Informatics Collaborative at PDPH (EpIC)
 - 3, soon to be 6 technical staff (developers / viz / project managers)
 - 5 epis, soon to be 6.
- Expertise in computer science, informatics, epidemiology and visualizing complex topics in a way the public can easily consume.
- Projects aligned with DMI priorities and bringing new applications on board smoothly, as well as building ETL pipelines.

Listening tour

- When the unit was established, we needed to get together a list of projects we could target with our resources.
 - Engaged partners early.
 - Asked about challenges, offered time and money.
 - Built relationships and trust.
 - Explained what data modernization was and why it would help.
 - Documented all projects, big and small.

Prioritizing projects

- High impact, low and sustainable cost.
- Complexity within scope
- Cloud if possible.
- Found similar themes that could be handled by enterprise applications and bundled those projects.

Choosing the right tools



REDCap

Easy to use by our clients, able to hand them their own project and mostly just let it run. //.

Monday.com

Fantastic for project management, used during scrum calls to focus the team on upcoming due dates



Quickbase

Case management enterprise solution with the ability to build your own workflow

Qualtrics Surveys + Texting



Rshiny + Posit

Internal and External R/Python solution

Example project

- Medical Examiners Office Access database.
- Decade old and internally built.
 - All the staff who built it retired.
- Documented requirements with a Business Analyst and Subject Matter Expert.
- Change management is challenging and requires demonstration of value (go to the workshop!).

Other project examples

- CME to CME moon.
 - Migrated an internally built corners app to a cloud hosted solution.
- STD clinic application moved to cloud.
 - Locally hosted vendor built app to cloud.
- LDX migration to the cloud.
 - Locally hosted vendor built app to cloud.
- Qualtrics messaging / text messaging.
- Document management of historic vitals records.
- Vitals pipeline redesign.

Sustainable funding

- Identifying these projects and prioritizing them takes time and resources.
- Projects identified were chosen with a focus to reduce future costs and remove legacy code that the department could no longer maintain.
- Cloud costs require a different model of funding, to maintain a steady flow instead of bursts of funding, so its important to properly assess what these costs will look like in the future.



