2021 NPCR KENTUCKY SUCCESS STORY

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NPCR Data Modernization Initiative Helps Kentucky Improve Cancer Reporting

National Program of Cancer Registries
SUCCESS STORY

SUMMARY

Electronic pathology (ePath) reports continue to be a critical primary source of cancer diagnosis information for cancer registries. The Kentucky Cancer Registry (KCR) currently receives the majority of ePath reports directly from hospital-based pathology labs, but a significant number of reports for Kentucky cases are generated by national pathology labs. NPCR has been instrumental in developing a reporting infrastructure for the national labs. KCR has developed processes and procedures to begin receiving ePath reports from national labs through a relatively new interface to the Association of Public Health Laboratories Informatics Messaging Services (APHL/AIMS) with the help of the Kentucky Department of Health (KYDOH) and the NPCR Program.

CHALLENGE

A growing number of ePath reports for cancer patients in the state of Kentucky originate from national reporting sources. These pathology reports are critical for KCR to maintain population-based cancer surveillance in the state. However, national reporting labs contend with requests to report to many different end points in different states utilizing a variety of transport protocols. Establishing and maintaining multiple point-to-point connections in a secure, maintainable manner, can be challenging. Consequently, national reporting labs would greatly benefit from an efficient, centralized method of sending multiple data streams to multiple state endpoints while ensuring the security and auditability of the data. Moreover, Kentucky and other states would greatly benefit from a single data provider that aggregates ePath reports from all national reporting sources through a single reporting interface, thus reducing staffing and other resources required at the central registry.

SOLUTION

APHL/AIMS is a secure, cloud-based platform for public health reporting used by federal agencies, regional commercial laboratories and hospitals, State Health Information Exchanges, and 50 state public health jurisdictions [1]. With assistance from the NPCR Program and the KYDOH, KCR has established a connection to APHL/AIMS for receiving electronic pathology reports from a variety of national reporting sources. Data flows from national reporting sources to APHL/AIMS, and then to the KYDOH where they are held for daily batch transmissions to KCR. To support this new incoming data source, KCR has developed and tested automated software to process APHL/AIMS reports for incorporation into its ePath repository. This solution should be scalable as additional national labs develop the capacity to transmit through APHL/AIMS. We anticipate that only minimal changes may be needed to onboard additional national labs. In addition, test reports were checked for validity and reportability as a final step before enabling the daily batch process for receiving data

RESULTS

KCR is still in the implementation and testing phase of this project but has successfully received hundreds of electronic pathology reports and incorporated them into the KCR ePath repository. Only limited informatics support was required of KCR staff since most of the electronic interface and transport configuration was handled by APHL/AIMS and the KYDOH. Most of the work on the KCR side was to develop automated software scripts for moving files into its repository. Early results are encouraging and suggest that the APHL/AIMS interface may prove to be a good solution for national lab reporting. This will ultimately lead to an increase in completeness and timeliness for cancer reporting in the state of Kentucky.

SUSTAINING SUCCESS

KCR plans to conclude testing and implementation for transition to the production phase by the end of 2021. The registry will continue to monitor incoming APHL/AIMS pathology reports for reportability and validity and will track the volume of reporting through this new method. KCR intends to continue to work with the NPCR program to identify additional national reporting sources that can transmit data through APHL/AIMS. As a result of this solution, we anticipate this effort will be sustainable with our existing resources.

REGISTRY CONTACT INFORMATION

859-619-1521
https://www.kcr.uky.edu/

REFERENCES

https://www.aphl.org/programs/informatics/Pages/aims_platform.aspx

NPCR NATIONAL PROGRAM of CANCER REGISTRIES

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention