2021 NPCR WISCONSIN SUCCESS STORY

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Wisconsin Cancer Reporting System – Comparing Data Processing in 2019 and 2021: From Chaos to Control

National Program of Cancer Registries
# SUCCESS STORY

SUMMARY

Historically, case submissions to the Wisconsin Cancer Reporting System (WCRS) from reporting facilities were erratic, leading to spikes in the processing of data, an overuse of resources, and difficulty in the prioritization of more meaningful efforts. In 2021, WCRS implemented changes, including more effective communication and project management, which made case submissions more consistent and reliable with little adverse impact on the central registry and reporting facilities.

CHALLENGE

Prior to the current V21 data transmission standard, the last major upgrade was V18 in 2018-2019. In 2020, no major version changes occurred, so for the purposes of this discussion, 2019 and 2021 will be compared. In 2019, WCRS was unable to process 12-month data until implementing software upgrades in September. This resulted in subsequent data processing (imports) of 53% of the total abstracts received in 2019 within a span of one month. The delay in processing made tracking data quality indicators and completeness of case ascertainment difficult. This issue was compounded by the fact that software was upgraded after annual call for data activities had been initiated. The subsequent processing of over 25,000 cases post-upgrade presented problems because the number of pending cases was very high and difficult to manage.

**Figure 1. 2019 Data Processing by Month**
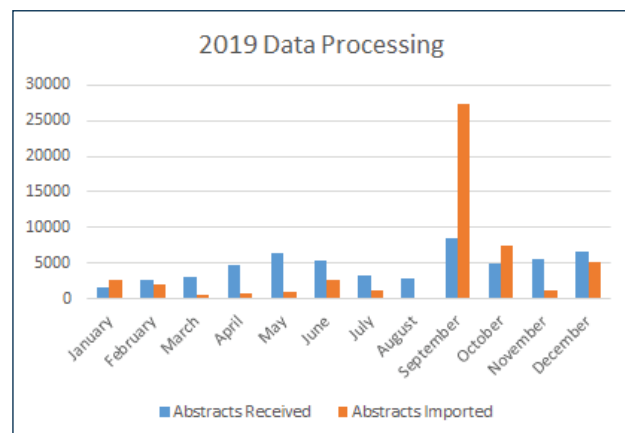
SOLUTION

Figure 1 above clearly shows when the software upgrade was implemented in 2019. WCRS started accepting V18 cases prior to our ability to process them, but could not actually process the cases until September, hence the spike.

When comparing this to major software upgrades in 2021 (Figure 2), the difference is clear. There is no month where the receipt and processing of data significantly increases or drops. For reference, Web Plus, Prep Plus, and CRS Plus were all upgraded in June of 2021. Wisconsin was among the first states to complete these upgrades.

Figure 2. 2021 Data Processing by Month
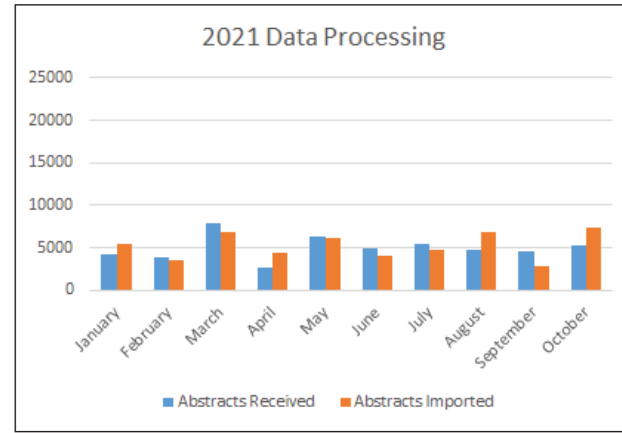
The reason there appears to be no major interruption to cases received or imported in 2021 are because of two changes that were implemented: more effective communication and project management.

More Effective Communication: WCRS focused efforts to inform and instruct reporting facilities about which diagnosis years and data transmission formats were being accepted. This was done through activities such as multiple emails with instructions, the introduction of "quick guides" regarding upcoming changes, reminder emails, and banners on the WCRS website.

To address late case submissions, the WCRS Education and Training Consultant (ETC) gave a presentation at the October 2020 Wisconsin Registrars' Association annual meeting outlining the negative impact of late reporting. This meeting was held virtually and without a registration fee, allowing more cancer reporters to attend than in prior years. The ETC included information on the cancer incidence data flow of files from facilities to WCRS, graphs showing the monthly distribution of case reports received by facilities, and the required case submission schedule to maintain timely reporting.

Project Management: Leveraging agile methodologies and utilizing resources readily available within the agency are key to the timely and smooth implementation of software. This is done using project management tools, embracing the agency's incident management system, fostering relationships with IT personnel, and planning resources in advance of upgrade.

RESULTS

The above efforts in improving communication with reporting facilities and practicing better project management resulted in increases in completeness of case ascertainment. This is clearly demonstrated when comparing 2019 and 2021 data at two major points in time: August, when many Call for Data activities begin, and in December, the time of Data Submission.

Figure 3. 12-Month Completeness at Two Points in Time
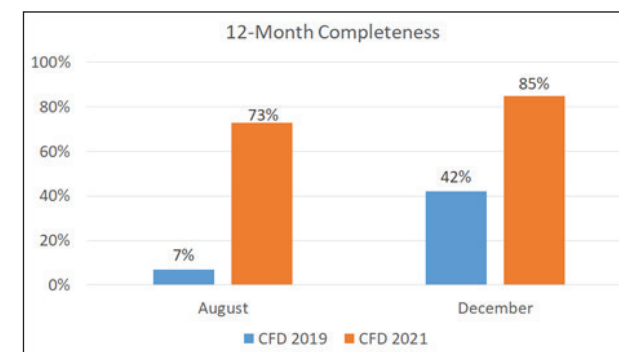
As can been seen in Figure 3, in 2019 a total of 7% of expected incidence cases for 12-month data had been received and processed in August. At the December 2019 Data Submission, 42% of the expected 12-month incidence cases had been received. In comparison, in 2021, estimates for completeness of case ascertainment are higher at both points in time. In August, an estimated total of 73% of expected incidence cases had been received and processed for 12-month data, a 10-fold increase compared to 2019. If current trends continue, completeness of case ascertainment for 12-month data is expected to be between 83% and 87% at the time of submission, double that of 2019.

SUSTAINING SUCCESS

The strategy for software implementation and communication through continued follow up and training with facilities is clearly effective in creating a steady stream of data with no major spikes or lags month-to-month. Contact with delinquent facilities can also help to determine steps to resolve the issue of delayed submissions. This allows better prediction of workload and prioritization.

Continuation of our efforts for improvement will allow better management of resources and create opportunities for projects to further improve their operations. Leveraging project management strategies used during software upgrades with other operations and quality improvement efforts will be key to continuous improvement. Adopting project management tools and software, increasing documentation, and continuing existing efforts will improve time management, registry operations, and ultimately, data quality.

REGISTRY CONTACT INFORMATION

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https://www.dhs.wisconsin.gov/wcrs/index.htm