

Completeness, Timeliness, Accuracy: Charting Vermont's Way to Improvements

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SUMMARY

The Vermont Cancer Registry (VCR) addressed longstanding challenges with data processing, timeliness, and completeness by reinstating quarterly Quality Indicator Reports (QIRs) in 2022, along with training and direct support for reporting facilities. These efforts led to an increase in 12-month completeness from 21% in 2021 to 85% for the 2023 data submission.

CHALLENGE

VCR faced challenges with processing data, providing timely feedback to reporting facilities, and monitoring completeness. Quarterly QIR reports are critical for evaluating timeliness, completeness, and key indicators for meeting the National Program of Cancer Registries' annual data submission standards, particularly the 90% advanced national completeness standard for 12-month data.

SOLUTION

VCR overhauled its case processing and quality assurance (QA) protocols, enabling it to resume QIRs.

In September 2022, VCR sent QIRs to Vermont reporting facilities, summarizing cancer data with a baseline for the diagnosis year 2020 (Figure 1). These reports evaluate facilities on timeliness, accuracy, and completeness while also supporting VCR's internal processes:

- **Timeliness:** Measured as the number of days from the 'Date of First Contact' to the 'Date Case Exported.' The standard is that 90% of cases should be reported within 180 days.
- **Accuracy:** Measured as the percentage of cases passing electronic edits in the Vermont Hospital Edit Set. The standard is 90% of cases passing edits.
- **Completeness:** Calculated as the average of a hospital's reporting over the previous 3 years.

RESULTS

Initially, Vermont hospitals performed poorly on the QIRs, leading to confusion and distress among facilities. Many registrars and administrators were unfamiliar with the reports, as they had not been issued since 2015. VCR underestimated the reports' effect and could have prepared facilities better.

In response, VCR acknowledged the challenges facilities faced, particularly those exacerbated by the COVID-19 pandemic. To address misunderstandings, VCR:

- Provided virtual training to registrars and administrators, explaining the purpose of QIRs, reporting periods, and quality measures.
- Held meetings between the registry manager, education and training coordinator, and individual facilities to clarify reports, answer questions, and offer support.

The QIRs also identified facilities struggling with timeliness and completeness, providing registrars and administrators with data to request more resources. Over the past 18 months, three facilities secured contracts with external companies to address backlogs and are working to comply with reporting requirements.

CONCLUSION

QIRs were designed to evaluate reporting quality, timeliness, accuracy, and completeness, and to provide actionable insights to hospital administration and registrars. By improving data submission quality, VCR can provide timely review and meaningful feedback, and better meet deadlines for annual data submissions.

While progress is incremental, the results are promising as reflected in responses to CDC inquiries:

- **August 2022:** VCR reported that the 2020 Vermont dataset was about 58% complete, excluding pending records and unprocessed cases.
- **September 2024:** VCR reported 24-month completeness at 100% and 12-month completeness at 81%.

Since reinstating QIRs, VCR and reporting facilities have made statewide improvements in completeness and timeliness. For example, 12-month completeness improved from 21% in 2021 to 85% for the 2023 submission. These advancements underscore the importance of QIRs as a tool for improving cancer reporting and ultimately public health outcomes.

REFERENCE

1. Kachajian J, Blosschies L, Flaherty M, Maynard H. *New Ideas and Fresh Perspectives - Improving Processing and Quality Assurance Using Automation and Expertise.* 2023 NPCR Vermont Success Story. Available at: www.cancerregistryeducation.org/Files/Org/f3fd382a7a242549a9999654105a63b/Site/2023-Vermont.pdf

Figure 1. Quality Indicator Report Timeliness 2020 Baseline (2022) and Q1 2024 (2024)

