# **2022 NPCR RHODE ISLAND SUCCESS STORY**

*Effective Time Management through Prioritization of Processing Case Reports* 

## **SUMMARY**

A Rhode Island Cancer Registry (RICR) quality assurance (QA) study of cancer case reports received from 2015 through 2019 recommended prioritizing first and second sources for a tumor during case completeness and timeliness assessment when staff are faced with several cases to process. This strategy makes case processing more efficient, manageable, and feasible without compromising data quality. The study found that RICR data was sufficient and had no major deficiencies.

## **CHALLENGE**

There are many redundancies in cancer case reports. SEER\*DMS software can scan resubmitted hospital records and auto-replace unknown values with known values while identifying if there are ambiguous or contradictory values that may need manual review. Unfortunately, RICR does not use SEER\*DMS. For any cancer registry, manual review of every incoming source is labor intensive, time consuming, and in some instances, may not add critical information. For each tumor they register, registry staff must often review case reports obtained three or more times and/or from numerous sources. This review process takes valuable time, especially during periods proximal to case submission deadlines.

### SOLUTION

To determine the degree to which case updates were adding to case completeness, the QA study focused on sources of case data for three variables across five recent years (2015-2019). Researchers sought to determine if any sources could be de-prioritized from case processing based on where the source originated and how many previous sources for that tumor already existed in the registry. To save time during busy reporting periods, especially before NPCR Call for Data, prioritizing first and second sources of a tumor is critical to efficient management and completion of case processing.

## RESULTS

The study concluded that for the variables race, SEER Summary Stage, and major source type, two reports were usually sufficient to achieve completeness, especially when registry staff experienced timeconstraints. Results allowed for registry staff to implement a more efficient case processing strategy as part of case review and cancer data quality assurance.

The first variable examined [was] race. Race is an NPCR National Data Quality Standard; no more than 3 percent can be missing. Of 33,148 tumors reported to the RICR between 2015 and 2019, just under 94% of tumors had a known race value in the first report. About 14,000 of these tumors had a second source, 10% of which added a race value where there was not one previously, bringing the overall share to 98%, [which exceeds] the national [data] standard. About 4,000 tumors had a third source, but only 2% of these sources added race information. Beyond the third source of a tumor, completeness improvements were negligible. Based on study results, an argument can be made that once a tumor has two sources, the third and all subsequent sources can be de-prioritized, at least in terms of race.





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

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However, the third source still identified race information 98 times, and 98 is not an inconsequential number in a population-based analysis. Each central cancer registry has a strategy in place to allocate limited case review resources and staff. The study noted that if registry staff have additional time, it may be worthwhile to process as many reports as possible. However, if there are limited staff and resources available due to multiple assigned registry roles and responsibilities, then largely redundant reports may be deprioritized.

Hospital and pathology lab source data gleaned valuable information from first and second sources of a tumor following the overall study findings. However, radiation facilities and out-of-state sources usually provided little relevant additional information to improve case report completeness. Although the RICR study looked at three variables exclusively, study results showed that third and later reports comprised 10.4% of all reports [processed by the Rhode Island Cancer Registry staff], which provided a potentially useful option if there are insufficient resources to process all incoming records. If the RICR ever finds itself with an unmanageable backlog, one solution may be to move all third and subsequent reports of a tumor into a suspense file, and review and process these reports when resources, staff, and time are available to focus on case processing activities.

## **REGISTRY CONTACT INFORMATION**

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## **SUSTAINING SUCCESS**

Based on our registry study results, creating a feasible strategy that prioritizes case processing and sources of a tumor record review results in timely, complete, and sufficient cancer data. Prioritizing which sources to include as part of case processing saves time and staff effort without compromising data quality.

## **STORY QUOTE**

"If there are too many cases to process, make third and subsequent sources for a tumor the lowest priority, as they seem to add little to no information." – Francis P. Boscoe, PhD