## MARYLAND

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As Time Goes By; Timeliness Evaluation of Hospital Reporting in Maryland

## NATIONAL PROGRAM OF CANCER REGISTRIES STORY NATIONAL PROGRAM OF CANCER REGISTRIES STORY NATIONAL PROGRAM OF CANCER REGISTRIES

**SUMMARY**: Since the timely submission of cancer cases to a central registry is critical to the completeness and quality of the data, the Maryland Cancer Registry (MCR) examined factors influencing the timeliness of hospital data submission in Maryland. Factors that decreased reporting time included if the facility was a Commission on Cancer Certified-facility, if the case was diagnosed at the facility and if the facility was in a rural area. Factors that increased reporting time included if the case was diagnosed at another facility; if the case was a prostate cancer; if the hospital had adequate staff for the registry; if there were physician staff changes; and if there were software changes, updates and/or implementations. Using these findings, the MCR identified strategies to mitigate factors that increased reporting time and will continue working with hospitals to improve timeliness.

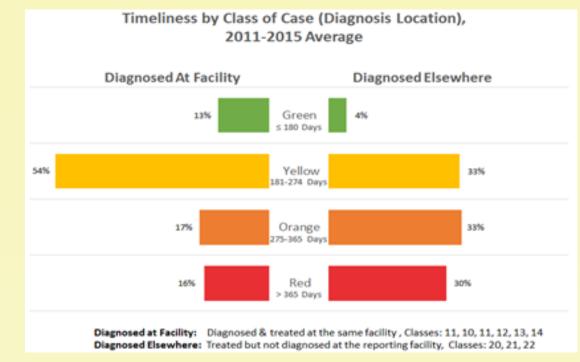
CHALLENGE: Submission of timely data is critical to research, and as such, national registry standard setters have established requirements related to data timeliness. Figure 1 below shows the various timeliness requirements by standard setter, including American College of Surgeons (ACoS) Commission on Cancer (COC), Centers for Disease Control and Prevention's (CDC) National Program of Cancer Registries (NPCR), National Cancer Institute's (NCI) Surveillance, Epidemiology and End Results Program (SEER), and the North American Association of Central Cancer Registries (NAACCR). Because of the importance of timely data, the MCR examined the timeliness of hospital data submissions in Maryland by assessing factors that influenced reporting time. The MCR looked at Date of Diagnosis (NAACCR Item 390) to Date Case Report Received (NAACCR Item 2111) on Maryland-only cases from hospitals between 2011 and 2015. The analysis excluded cases with missing month and day of diagnosis, as well as, any cases generated by the MCR.

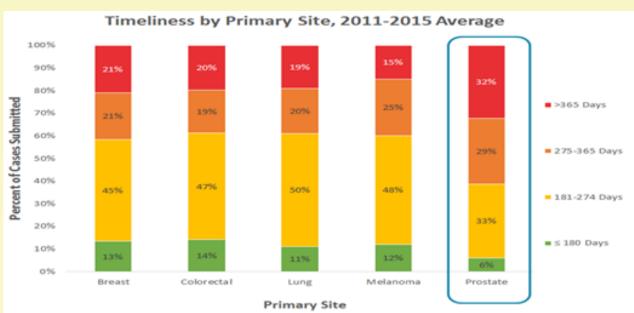
Standard Setter	Timeliness Requirement (from end of data year)				
	6 Months	12 Months	22 Months	23 Months	24 Months
ACoS/CoC	90%				
CDC/NPCR		90%			95%
NCI/SEER			100%		
NAACCR					
Gold				95%	
Silver				90%	
<b>-</b> //	Standards for Cancer Registries Volume III: Standards for Completeness, Quality, Analysis, Management, Security and Confidentiality of Data (2008)				

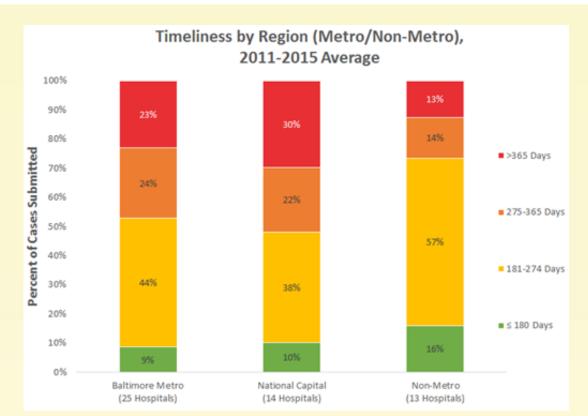
**SOLUTION:** This analysis provided the MCR with a deeper understanding of the factors that influence the timeliness of cancer registry data submissions in Maryland and will be used to assist hospitals in improving the timeliness of their reporting. This will enable the MCR to have more robust data and to better meet both NPCR and NAACCR's reporting requirements.

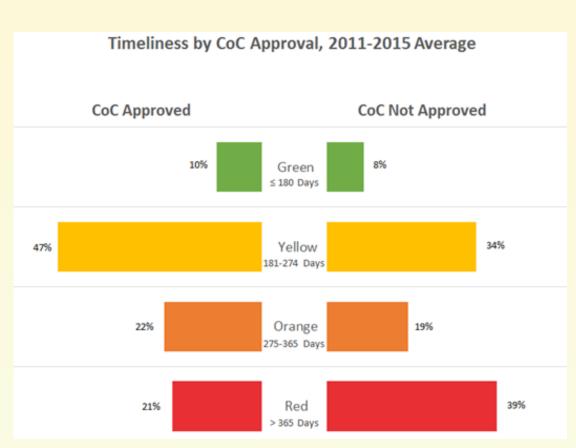
**RESULTS**: Of the 170,000 abstracts submitted by Maryland hospitals from 2011 to 2015, the MCR found that hospitals took an average of 319 days and a median of 262 days to report cases to the central registry. The minimum reporting time was 6 days from diagnosis and the maximum was more than 7 years.

The analysis showed differences in timeliness based on the class of case, cancer type, hospital location, and COC certification status. On average, cases that involved treatment but the diagnosis was made elsewhere had a longer reporting time than cases involving treatment and diagnosis at the same facility, with 37% versus 67% of cases reported within 274 days, respectively (Figure 2). Prostate cancer cases also had an increased reporting time compared to breast, colorectal, lung, and melanoma cancers, with 39% of cases reported within 274 days compared to 58%, 61%, 61%, and 60%, respectively (Figure 3). Hospitals in the Baltimore and Washington D.C. metro areas had a longer average reporting time than rural hospitals, with 53%, 48%, and 73% of cases reporting within 274 days, respectively (Figure 4). Additionally, non-COC approved facilities had a longer reporting time than COC approved facilities, with 57% of cases reported within 274 days compared to 42%, respectively (Figure 5). Other factors that increased reporting time included a lack of adequate registry staff at hospitals, physician staff changes, and software changes or updates.









**SUSTAINING SUCCESS:** The MCR has already taken steps to improve timeliness by providing reporters with facility performance reports that include comparisons with other reporting facilities. The MCR also implemented internal monthly reviews of submissions and had frequent discussions with reporting facilities to identify submission issues sooner, which will result in decreased reporting time. The MCR plans to provide additional education and training to reporters regarding the coding of prostate cancer and will remind reporters of the reporting deadlines through the MCR E-Update, email blasts, and local tumor registrar association. The MCR will continue to evaluate efforts to improve the timeliness of reporters by analyzing and documenting trends over time.





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