

2021 NPCR ILLINOIS SUCCESS STORY

Illinois State Cancer Registry: Bonnie Redeford, CTR

Implementation of Database to Track and Report Duplicate Cases

National Program of Cancer Registries SUCCESS STORY

SUMMARY

The Illinois State Cancer Registry (ISCR) created a tool to track and report duplicate cases identified in case consolidation activities by submitting hospital, abstractor, primary site, and reason cases that are duplicates. Reports will be used to assist in training plans.

CHALLENGE

ISCR wanted to implement a time-effective method to educate abstractors, to reduce duplicate cases, to improve data quality in both the hospital and central registry, and to reduce the time hospital staff spend abstracting duplicates and the time central registry staff spend identifying and deleting duplicate records.

SOLUTION

ISCR created a Duplicate Database, using Microsoft Access, to store and track duplicate case information. The database houses demographic and tumor information, the reason the case was a duplicate (from a defined set of reasons), and a comment field used to explain in detail why the cases are duplicates. The database can quantify duplicates by reason the case is a duplicate, by reporting hospital, by abstractor, by primary site, and by diagnosis date. Two standard reports are output: a letter for each duplicate case and an administrative report summarizing duplicate cases letters generated each month by submitting hospital and reason case is a duplicate. Ad hoc reports can be created to allow ISCR staff to identify training needs and develop appropriate training plans and materials at a hospital and/or state-wide level. Once a month, letters describing duplicate cases identified in that month are sent to reporting hospitals using a secure site. Hospital staff only need to reply to the letter if they disagree with ISCR.

RESULTS

ISCR staff began using the Duplicate Database February 1, 2021. Between March and August of 2021, ISCR sent reports to reporting hospitals for a total of 237 duplicate cases. Each month between 22 and 99 letters were sent to 9 to 50 hospitals. As shown in Table 1, below, the most common reason facilities submitted duplicate cases was failure to correctly apply the multiple primary rules (51% of all duplicates). The second most common reason was submitting cases with differences in demographic fields (the hospital failed to recognize the cases were for the same person).

The Duplicate Database project is new, and the hospitals have only had a few months to apply any abstracting changes in response to the letters received, so it is too early to assess the effectiveness of this tool in reducing the number of duplicate cases. However, hospitals that submitted the greatest number of duplicates appear to be showing a decrease in the number of duplicates over time. The hospital that submitted the most duplicate cases to date has shown a decrease from 18 duplicate cases in a month to only one or two per month.

Other than the time required to input cases in the database, this project has not placed additional time demands on ISCR staff. ISCR has received no negative feedback from hospital registries in response to the duplicate letters and hospitals have contacted ISCR only three times because they disagreed the cases were duplicates. One hospital identified and corrected software issues that were resulting in the resubmission of previously submitted cases. Only one case reported by ISCR as a duplicate was determined in the end to not be a duplicate record because the registrar had accidentally submitted a case with incorrect tumor information.

Month	Number of Letters sent	# of hospitals receiving letters	Reason case is duplicate			
			same case resubmitted	different demographics	same prim per multiple primary rules	other
March*	99	50	16	26	54	3
April	13	9	4	7	2	0
May	18	9	1	3	14	0
June	49	24	6	3	27	13
July	36	19	15	5	11	5
August	22	15	2	7	12	1
TOTAL	237		44	51	120	22

* letters sent for cases identified in February and March

SUSTAINING SUCCESS

ISCR will continue to use the Duplicate Database and monitor the effectiveness of this training tool. As hospital registry staff change over time and new solid tumor rules are implemented, it is anticipated the database and letters will remain a good training tool that requires minimal time input for both central registry staff and hospital staff.

REGISTRY CONTACT INFORMATION

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<http://www.dph.illinois.gov/data-statistics/epidemiology/cancer-registry>



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