

# Monthly Vital Statistic Data Linkage with Kansas Cancer Registry Database Reduces Hospital Death Certificate Only Cases

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## SUMMARY

Central cancer registries across the United States are required to conduct death clearance annually prior to the annual data submission to CDC's National Program of Cancer Registries (NPCR). It is an important, yet challenging, process for central cancer registries in several ways. To decrease the number of hospital death certificate only (DCO) cases, reduce the registry's staff time to process death clearance, and eliminate the cost to retrieve the death certificates for health care facilities, the Kansas Cancer Registry (KCR) started to perform a monthly vital statistics record linkage with the central registry database.

## CHALLENGE

Death clearance can be a long and tedious process that results in a high percentage of cases that are classified as DCO. Some challenges relate to the timing of when a death clearance is deployed. Annual death clearance faces many challenges, such as medical records of the deceased having been archived. Further, cancer registries continued to deal with staffing costs and the timeline for data certification while receiving the already known data point "deceased."

## SOLUTION

Over the past two decades, KCR has changed its death clearance protocol. In 1996, the registry performed the annual linkage 1 year after the close of a diagnosis year. The 1-year delay allowed many cases to be reported to KCR. During 2006, the delay was extended to 1.5 years to allow more case reporting from hospitals, which reduced the number of possible DCO cases prior to starting the DCO clearance process. Before 2012, KCR was able to extract a partial death record directly from the vital statistics. In 2012, KCR started conducting monthly data linkages with vital records. The monthly linkage not only fulfilled the function of death clearance more efficiently but also helped reporting facilities with their active follow-up and case finding. This revised process resulted in a lower number of hospital DCO cases.

## RESULTS

The monthly vital statistics linkages helped the reporting facilities with active case finding and follow-up, and improved collaboration between KCR and hospital tumor registries. The DCO cases started at about 8% at the first linkage. After moving to the monthly linkage process, the number of DCO cases dropped dramatically, especially the number of hospital DCO cases. In 2014, about 20% of DCO cases were from hospitals; now, fewer than 10% of DCO cases are from hospitals.

## CONCLUDING REMARKS

Death clearance via routine monthly vital statistics linkages has reduced the number of hospital DCO cases and kept them at a low number. KCR expects this process to be sustainable, since it benefits KCR operations and helps reporting facilities with their active follow-up and case finding efforts.



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