

Changes In The Completeness Of The Social Security Death Master File: A Case Study

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Citation

C Maynard. *Changes In The Completeness Of The Social Security Death Master File: A Case Study*. The Internet Journal of Epidemiology. 2013 Volume 11 Number 2.

Abstract

As of November 1, 2011, the Social Security Administration (SSA) Death Master Filer (DMF) no longer contains protected state death records [1]. Consequently, approximately 4.2 million records were removed from the historical file of 89 million and annually about 1 million fewer records will be added. Many parties including researchers and healthcare administrators, as well as the general public and genealogical organizations rely heavily on the DMF, because it is publically available, relatively inexpensive, and comprehensive [2,3]. This significant change will have effects on both healthcare research and operations [4,5]. To determine the potential consequences of this change, for 4 different time points we selected deceased individuals listed in the obituary section of the Tacoma, Washington News Tribune and determined whether they were also included in the DMF. The expectation was that DMF capture would be better prior to November 1, 2011.

INTRODUCTION

As of November 1, 2011, the Social Security Administration (SSA) Death Master Filer (DMF) no longer contains protected state death records [1]. Consequently, approximately 4.2 million records were removed from the historical file of 89 million and annually about 1 million fewer records will be added. Many parties including researchers and healthcare administrators, as well as the general public and genealogical organizations rely heavily on the DMF, because it is publically available, relatively inexpensive, and comprehensive [2,3]. This significant change will have effects on both healthcare research and operations [4,5]. To determine the potential consequences of this change, for 4 different time points we selected deceased individuals listed in the obituary section of the Tacoma, Washington News Tribune and determined whether they were also included in the DMF. The expectation was that DMF capture would be better prior to November 1, 2011.

METHODS

Obituary archives were searched for 4 different time points; March 2010, October 2011, December 2011, and March 2012. For the years (2010 and 2012) before and after the change, March was randomly chosen as the month of interest. Using the decedent's full name, date of birth, and date and place of death, the Ancestry Library Edition was used to search the DMF. Given that the search had to be

conducted 1 decedent at a time, only 200 obituaries were selected. For March 2010 and 2012, the first 50 obituaries with a complete date of death were selected and for the months (October and December) immediately before and after the change, a similar strategy was used to select the first 50 obituaries.

RESULTS

As expected the decedents were mostly older women (table), although this was not the case in October 2011. Over 18 months prior to the change, all 50 decedents were identified in the DMF and in October 2011 78% were identified. In December 2011 only 30% of decedents were identified and several months later 34% were identified (table). In the period prior to the change 89% were identified and in the period after only 32% appeared in the DMF; the overall difference was 57% (95% confidence interval=45%-67%).

Table 1

Decedent age and gender and percent capture by time

	March 2010 (n=50)	October 2011 (n=50)	December 2011 (n=50)	March 2012 (n=50)
Age in years (mean, SD)	71±18	74±16	79±16	74±15
Women (%)	56%	36%	66%	52%
In death master file(%)	100%	78%	30%	34%

SD standard deviation

DISCUSSION

The difference in the percent identified in the DMF before and after November 2011 was significant and consistent with state death records not being included in the publicly available DMF. In 2010, the DMF contained approximately 2.8 million death records for that year [6]. Given a loss of approximately 1 million records per year, this means that almost 40% of deaths will be excluded. The current study reported an overall loss of 57%. This in part may be due to the high capture rate prior to the change, as well as the relatively small sample size. Most obituaries provide exact dates of birth and death and this improved identification of decedents in the DMF. In addition, the Tacoma News Tribune has a searchable obituary archive, and has the second largest circulation of newspapers in Western Washington State. The consequences of the loss of death records and potential remedies have been discussed by da Graca et al [5].

The purpose of the study was to determine if the loss of death records due to changes in policy regarding the disclosure of state death records was around 40%. It was convenient and efficient to search the obituary archives of a local newspaper to determine for a “real life situation” what the loss of records was. Newspapers have differing policies regarding obituaries and death notices in that some provide listings for no charge, whereas others charge for this service. There may be bias in that individuals with obituaries or death announcements are more likely to have friends or relatives who cared enough to notify the paper, write the obituary, and pay for it if necessary. Whether the loss of death records would be different for individuals without obituaries is difficult to say. The proportion of all deceased individuals who have obituaries is not precisely known, although one organization estimates it has obituaries

for 75% of all deaths in the United States (<http://www.legacy.com/NS/about/>). We did not have the resources to examine obituaries from other regions of the United States or to explore other linkages such as state death records.

We are unaware of other studies that have attempted to estimate the loss of records due to the policy change. The expected loss of 40% is considerable and many organizations are seeking ways to change this policy, as the DMF is the only comprehensive, publicly available death database in the United States. Results from the current study suggest that in some cases the loss of records could be even greater than expected.

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