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How different administrative databases change the size of a potential palliative care population

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Objectives

To evaluate how the size and characteristics of potential palliative care populations vary depending on which administrative data sources are used to identify them and how inclusion criteria are applied.

Approach

Population-based studies in palliative care have used a range of administrative databases including death certificate data and linked hospital admissions data to identify people who received or could have benefited from palliative care. We conducted a retrospective cohort study using linked hospital admissions and mortality data from the Western Australian Data Linkage System to evaluate how the size and distribution of the potential palliative care populations varied according to the data sources, whether linked data were used and how inclusion criteria were applied. Our cohort consisted of 23,852 people aged 20 years and over who died in Western Australia between 1 January 2009 and 31 December 2010 after excluding those whose deaths related to pregnancy or trauma. Within this cohort, the number, proportion and characteristics of people who died from one or more of 10 medical conditions considered amenable to palliative care were identified using different information sources.

Results

Of the 23,852 people who died, a total of 10,445 (43%) people had a condition potentially amenable to palliative care recorded as the underlying cause of death on their death certificate. This increased to 15,064 (63%) people when including one of these conditions listed anywhere on their death certificate. When hospital admission records from the last year of life and death records were used to identify people who might potentially have

benefited from palliative care, there were 17,384 (73%) people identified with at least one of these conditions. The median age at death varied by up to 12 years between data sources depending on condition. The sex distribution of the decedents, which was measured in terms of the proportion of males dying from the condition, showed variations of up to 30% depending on the data source.

Conclusion

The use of different data sources to identify conditions that might benefit from palliative care will result in differing frequency of conditions and age and sex distribution of the population. This is a result of many people having multiple conditions and the method in which these are recorded in different data sources. It is important to be aware of the characteristics of the individual data sources when the data are used for health service planning.

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