

Abstract: Assessing the quality of cause of death data in six high-income countries: Australia, Canada, Denmark, Germany, Japan and Switzerland

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Objectives

To assess the policy utility of national cause of death (COD) data of six high-income countries with highly developed health information systems.

Methods

National COD data sets from Australia, Canada, Denmark, Germany, Japan and Switzerland for 2015 or 2016 were assessed by applying the ANACONDA software tool. Levels, patterns and distributions of unusable and insufficiently specified “garbage” codes were analysed.

Results

The average proportion of unusable COD was 18% across the six countries, ranging from 14% in Australia and Canada to 25% in Japan. Insufficiently specified codes accounted for a further 8% of deaths, on average, varying from 6% in Switzerland to 11% in Japan. The most commonly used garbage codes were Other ill-defined and unspecified deaths (R99), Heart failure (I50.9) and Senility (R54).

Conclusions

COD certification errors are common, even in countries with very advanced health information systems, greatly reducing the policy value of mortality data. All countries should routinely provide certification training for hospital interns and raise awareness among doctors of their public health responsibility to certify deaths correctly and usefully for public health policy.

Keywords

Causes of death, Medical certification, Data quality, Garbage codes, Assessment of data

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