

Dear Editor,

In the February issue of *Healthcare Policy*, Allin and Grignon (2014) defend the use of amenable (or avoidable) mortality as an indicator of health system effectiveness, in response to our article questioning its use at the level of Canadian health regions.

We agree that amenable mortality is useful as a macro-level “tin-opener” to identify potential gaps in healthcare delivery – as it was originally intended (and as it was described in the CIHI 2012 Health Indicators Report). We also agree that a good indicator of health system effectiveness should be sensitive to outcomes under the control of the health system. While measuring population health is important for some purposes, we also need to know if people are getting timely access to high-quality care. And so, perhaps most importantly, we agree that finding measures that are more sensitive to health system effectiveness than total mortality is a high priority.

Where we differ is in our confidence that amenable mortality clearly separates mortality into causes of death that are sensitive to health system interventions and those that are not. Allin and Grignon illustrate the superiority of a measure that reflects only the component of mortality sensitive to the health system over all-cause mortality. If amenable mortality did just this, it would truly be invaluable, but labeling causes of death as ‘amenable,’ ‘avoidable,’ or ‘treatable’ does not mean these categories have perfect specificity.

CIHI’s expert panel (like other groups that have developed similar indicators) included deaths occurring before age 75 if “potentially avoidable” through prevention or treatment (CIHI 2012). Allin and Grignon cite the example of pneumonia: in the presence of timely, high-quality healthcare, young people should not die from pneumonia. However, pneumonia and other infectious diseases account for only 6% of deaths classified as treatable. Far greater proportions are cancers (42%) and circulatory diseases (18%), where classification based on the effectiveness of available treatments and the contributions of primary, secondary and tertiary prevention is complex. In all cases the age cut is necessarily arbitrary. Of course, many deaths should be avoidable through treatment before age 75, but surely not all (sometimes strokes kill people instantly). Similarly, some cases after 75 should be avoidable as well (a 76-year-old can be saved with appropriate care following a heart attack).

In truth, some fraction of deaths classified as amenable are not in fact sensitive to the health system and some fraction of those not classified as amenable are. We could not measure these fractions directly, but neither has anyone else. This is why we interpret the high degree of correlation between amenable and premature mortality found in our research as suggesting that amenable mortality can only be offering a small improvement over premature mortality.

This relates to our other concern about using amenable mortality. Because of small numbers in many health regions, several years of data have to be pooled to create a stable measure.

This blunts sensitivity to changes over shorter time periods useful for examining policy changes. There is a trade-off then between the potential improvement in amenable vs. premature mortality and the greater sample size offered by the latter.

We do not reject amenable or avoidable mortality for all purposes – we simply question whether it is sensitive enough to provide useful information at a health region level, where differences in effectiveness are likely to be subtle. The point in our paper about Vancouver (Lavergne and McGrail 2013), for example, was that higher than expected amenable mortality rates are likely driven by mortality in the Downtown Eastside. Poor health outcomes there may be traced to cycles of poverty, violence and abuse outside the direct control of the health-care system. Interpreting amenable mortality rates as evidence that health system managers should invest more resources per case, as Allin and Grignon suggest, may divert resources from investment outside the healthcare system that more directly targets underlying causes. What's more, the special nature of this area of Vancouver is already well known by decision-makers, and poor health outcomes are already reflected by other measures.

There is no escaping that however carefully it is defined, amenable mortality is still an indirect measure of health system effectiveness. Finding potential gaps in healthcare delivery, as it was intended, is not the same as assessing timely access to high quality care, as Allin and Grignon argue it can be used. Let's not let more widespread use of amenable mortality distract us from collecting the data we really need in order understand quality and access in healthcare, and more directly measure health system effectiveness.

Sincerely,

Ruth Lavergne and Kimberly McGrail

References

- Allin, S. and M. Grignon. 2014. "Examining the Role of Amenable Mortality as an Indicator of Health System Effectiveness." *Healthcare Policy* 9(3): 12–19. doi:10.12927/hcpol.2014.23733.
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- Lavergne, M.R. and K. McGrail. 2013. "What, If Anything, Does Amenable Mortality Tell Us about Regional Health System Performance?" *Healthcare Policy* 8(3): 79–90. doi:10.12927/hcpol.2013.23178.