



4 May 2016

## The BMJ Press Release

### **Medical error is third biggest cause of death in the US, say experts**

Medical error is the third leading cause of death in the US after heart disease and cancer, say experts in **The BMJ** today.

Martin Makary and Michael Daniel at Johns Hopkins University School of Medicine in Baltimore say death certificates in the US have no facility for acknowledging medical error, and they call for better reporting to help understand the scale of the problem and how to tackle it.

Currently, death certification in the US relies on assigning an International Classification of Disease (ICD) code to the cause of death – so causes of death not associated with an ICD code, such as human and system factors, are not captured.

According to the World Health Organization, 117 countries code their mortality statistics using the ICD system, including the UK and Canada.

As a result, accurate data on deaths associated with medical error is lacking, but recent estimates suggest a range of 210,000 to 400,000 deaths a year among hospital patients in the US.

Using studies from 1999 onwards - and extrapolating to the total number of US hospital admissions in 2013 – Makary and Daniel calculated a mean rate of death from medical error of 251,454 a year.

Comparing their estimate to the annual list of the most common causes of death in the US, compiled by the Centers for Disease Control and Prevention (CDC), suggests that medical error is the third most common cause of death in the US.

They acknowledge that human error is inevitable, but say “although we cannot eliminate human error, we can better measure the problem to design safer systems mitigating its frequency, visibility, and consequences.”

They believe strategies to reduce death from medical care should include three steps: making errors more visible when they occur so their effects can be intercepted; having remedies at hand to rescue patients; and making errors less frequent by following principles that take human limitations into account.

For instance, instead of simply requiring cause of death, they suggest that death certificates could contain an extra field asking whether a preventable complication stemming from the patient’s medical care contributed to the death.

Another strategy would be for hospitals to carry out a rapid and efficient independent investigation into deaths to determine the potential contribution of error.

Measuring the consequences of medical care on patient outcomes “is an important prerequisite to creating a culture of learning from our mistakes, thereby advancing the science of safety and moving us closer towards creating learning health systems,” they add.

“Sound scientific methods, beginning with an assessment of the problem, are critical to approaching any health threat to patients,” they write. “The problem of medical error should not be exempt from this scientific approach.”

And they call for “more appropriate recognition of the role of medical error in patient death to heighten awareness and guide both collaborations and capital investments in research and prevention.”

[Ends]

### **Note to Editors**

Analysis: Medical error—the third leading cause of death in the US

<http://www.bmj.com/cgi/doi/10.1136/bmj.i2139>

### **About BMJ**

BMJ is a healthcare knowledge provider that aims to advance healthcare worldwide by sharing knowledge and expertise to improve experiences, outcomes and value. For a full list of BMJ products and services, please visit [bmj.com](http://bmj.com).