Widely used software doesn't note differences in care quality among hospital readmissions

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The 3M software program, increasingly used to make payments to US hospitals based on readmission rates, doesn't clearly distinguish differences in care quality—one of the key factors involved in readmission—between readmissions that are preventable and those that aren't, suggests research published online in *BMJ Quality and Safety*.

The Centers for Medicare and Medicaid Services (CMS) posts data on 30 day readmissions for three common causes of hospital admissions: heart attack; heart failure; and pneumonia.

Hospitals with high rates of readmissions are penalised financially and get less money from Medicare regardless of whether or not those readmissions could have been prevented.

In a bid to improve on the CMS measure and identify readmissions more likely to be preventable, 3M developed the Potentially Preventable Readmissions (PPRs) measure, which is now increasingly used by US state Medicaid programs for hospital payments.

3M identifies readmissions with diagnoses that are clinically related to those prompting the initial admission, to flag those patients whose readmission could have been avoided, and then generates hospital level rates of avoidable readmissions, taking account of population case mix and illness severity.

But it is not known to what extent these pairings reflect quality of care problems and which readmissions are therefore truly preventable.

The researchers therefore looked at whether readmissions flagged as PPRs by 3M were associated with poorer quality of care than those that weren't in Veterans Health Administration patients admitted to hospital with pneumonia, and readmitted within 30 days, between 2006 and 2010.

They reviewed the medical records of 100 randomly selected cases out of more than 11,000, to look at the quality of care these patients had been given while in hospital and after discharge, using processes of care derived from evidence based data and a panel of clinical experts.

Somewhat surprisingly, the quality of care among the 77 cases flagged as PPRs was slightly better than the 23 unflagged cases (total average scores of 71.2 vs. 65.8 out of 100), although this difference was not statistically significant.

And there was also little information about the quality of care after discharge for flagged and unflagged cases.

Their findings lead the researchers to conclude that either PPR flagged cases are not more preventable, or that assessment of preventability requires other data collection methods to capture poorly documented processes.

In a linked editorial, Drs Christine Soong and Chaim Bell of Mount Sinai Hospital in Toronto, Canada, suggest that: "After years of intensive research to find an objective measure of preventable readmissions, it seems as imminent as the arrival of Godot."

And they suggest that perhaps it's time to think differently about the

issue. Readmission rates are too crude a measure and aren't really patient centred, they suggest.

"The time has come to shift the focus of readmissions away from hospitals to a broader health systems approach," they write. "Rather than focusing on readmissions, preventable or otherwise, time may be better spent in developing quality measures of complex disease management across a patient's continuum of care," they write.

More information: Do pneumonia readmissions flagged as potentially preventable by the 3M PPR software have more process of care problems? A cross sectional observational study, DOI: 10.1136/bmjqs-2014-003911

Editorial: Identifying preventable readmissions: an achievable goal or waiting for Godot? DOI: 10.1136/bmjqs-2015-004484

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